(c 1850-1950)

11

PLEASE use care in turning pages

C & NW

MILWAUKEE

N. P.

G. N.

SP & S

Soo LINE

C. G W

M & St L

## DEDICATION

To those gentlemen of the Steam Age who took camera in
and and ventured forth to photograph railroading in the
orthWest. ... They recorded on film scenes of those days
hat have passed on forever. Most worked with equipment that
as the best at the time but today would be considered "crude".
ight conditions had to be near perfect, with only eight shots
o a roll he was frequently changing film, reaching locations
ight turn into an expedition. ... They were really "rail
ans" before the term was ever thought of. To them we owe a
eep sense of gratitude and a sincere "Thanks" for a wealth
f photos they left for us to envy and enjoy.

Some of these gentlemen would include Albert Farrow, Fred
ukes, Lee Pickett, Jim Turner, H. L. Arey, Dr. Phil Hastings,
. V. Nixon, W. R. McGee, Dick Kindig, H. R. Griffiths, Wally
wanson, Jim Frederickson to name just a few.

---

**FAST TRANSPORTATION OF FREIGHT**
Over its network of strategic lines in the Great Midwest
**AND THROUGH ITS PEORIA GATEWAY**

THE MINNEAPOLIS & ST. LOUIS RAILWAY CO. — THE PEORIA GATEWAY

**THE MINNEAPOLIS & ST. LOUIS RAILWAY**
*General Offices:* NORTHWESTERN BANK BUILDING, MINNEAPOLIS 2, MINN.

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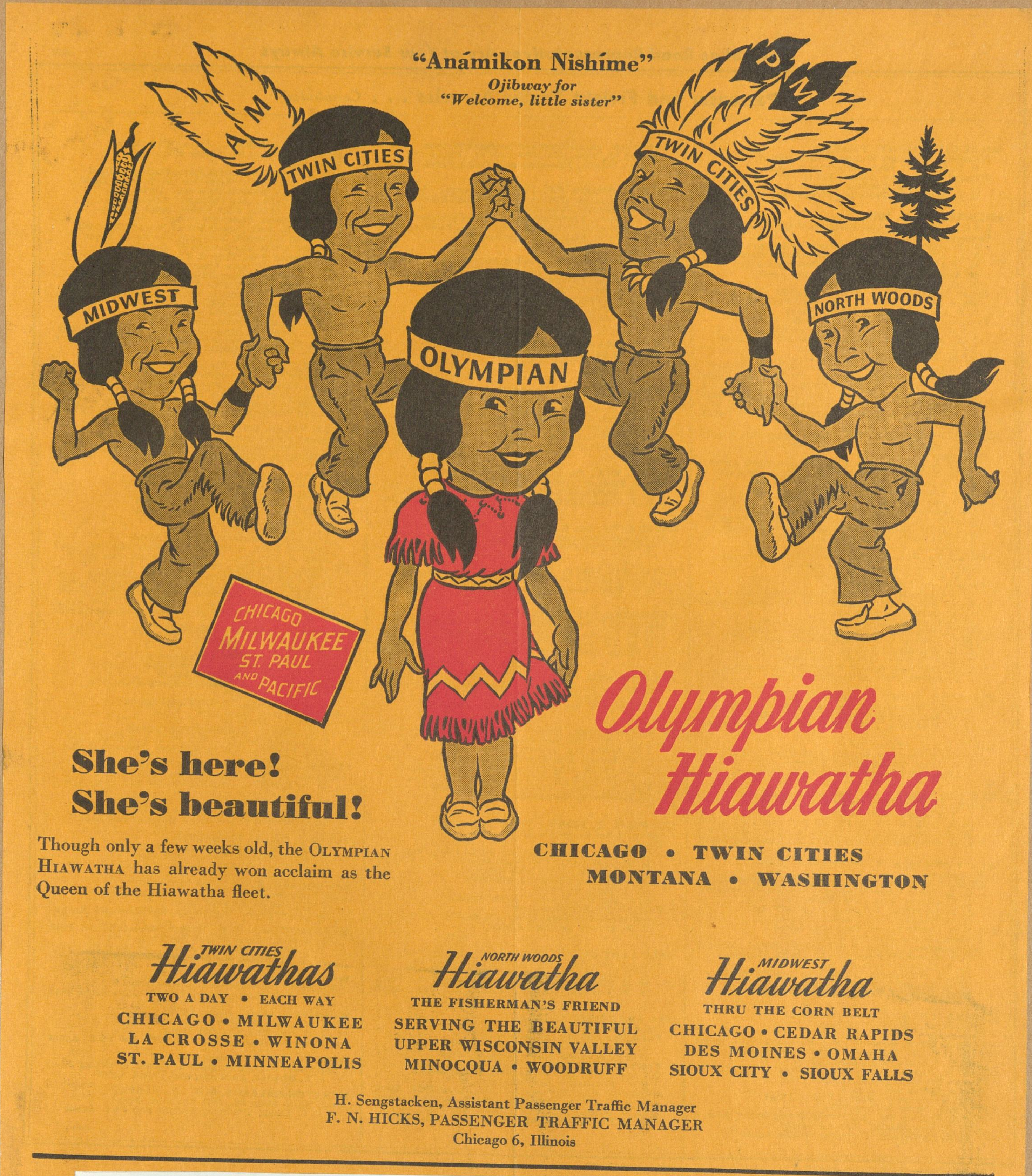
"Anámikon Nishíme"
Ojibway for
"Welcome, little sister"
A M
P M
TWIN CITIES
TWIN CITIES
MIDWEST
OLYMPIAN
NORTH WOODS
CHICAGO MILWAUKEE ST. PAUL AND PACIFIC

**She's here!**
**She's beautiful!**

Though only a few weeks old, the OLYMPIAN HIAWATHA has already won acclaim as the Queen of the Hiawatha fleet.

## *Olympian Hiawatha*

CHICAGO • TWIN CITIES
MONTANA • WASHINGTON

*TWIN CITIES* ***Hiawathas***
TWO A DAY • EACH WAY
CHICAGO • MILWAUKEE
LA CROSSE • WINONA
ST. PAUL • MINNEAPOLIS

*NORTH WOODS* ***Hiawatha***
THE FISHERMAN'S FRIEND
SERVING THE BEAUTIFUL
UPPER WISCONSIN VALLEY
MINOCQUA • WOODRUFF

*MIDWEST* ***Hiawatha***
THRU THE CORN BELT
CHICAGO • CEDAR RAPIDS
DES MOINES • OMAHA
SIOUX CITY • SIOUX FALLS

H. Sengstacken, Assistant Passenger Traffic Manager
F. N. HICKS, PASSENGER TRAFFIC MANAGER
Chicago 6, Illinois

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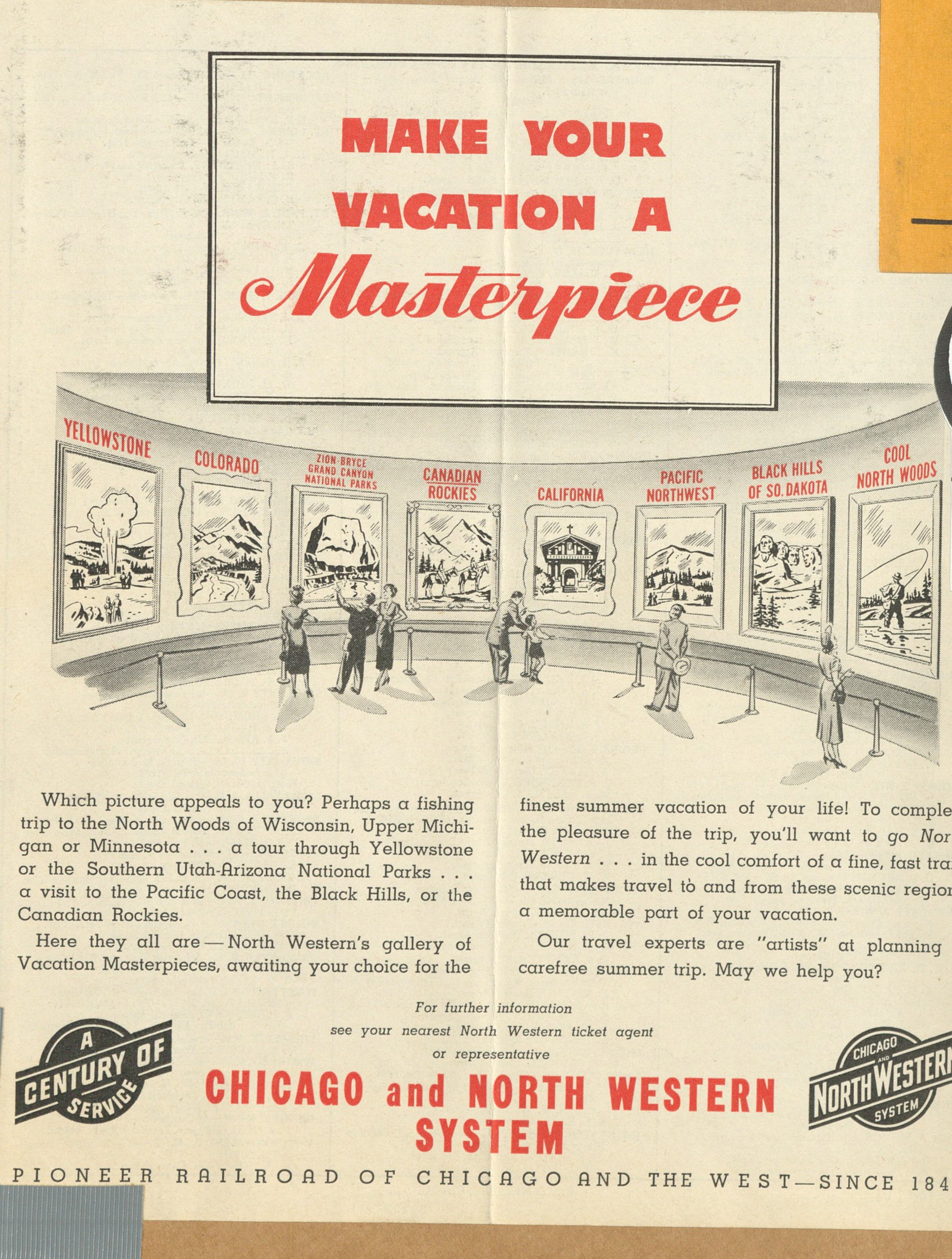
## MAKE YOUR VACATION A *Masterpiece*


YELLOWSTONE
COLORADO
ZION BRYCE GRAND CANYON NATIONAL PARKS
CANADIAN ROCKIES
CALIFORNIA
PACIFIC NORTHWEST
BLACK HILLS OF SO. DAKOTA
COOL NORTH WOODS
A CENTURY OF SERVICE
CHICAGO AND NORTH WESTERN SYSTEM

Which picture appeals to you? Perhaps a fishing trip to the North Woods of Wisconsin, Upper Michigan or Minnesota . . . a tour through Yellowstone or the Southern Utah-Arizona National Parks . . . a visit to the Pacific Coast, the Black Hills, or the Canadian Rockies.

Here they all are — North Western's gallery of Vacation Masterpieces, awaiting your choice for the finest summer vacation of your life! To complete the pleasure of the trip, you'll want to go *North Western* . . . in the cool comfort of a fine, fast train that makes travel to and from these scenic regions a memorable part of your vacation.

Our travel experts are "artists" at planning a carefree summer trip. May we help you?

*For further information*
*see your nearest North Western ticket agent*
*or representative*

**CHICAGO and NORTH WESTERN SYSTEM**

PIONEER RAILROAD OF CHICAGO AND THE WEST—SINCE 1848

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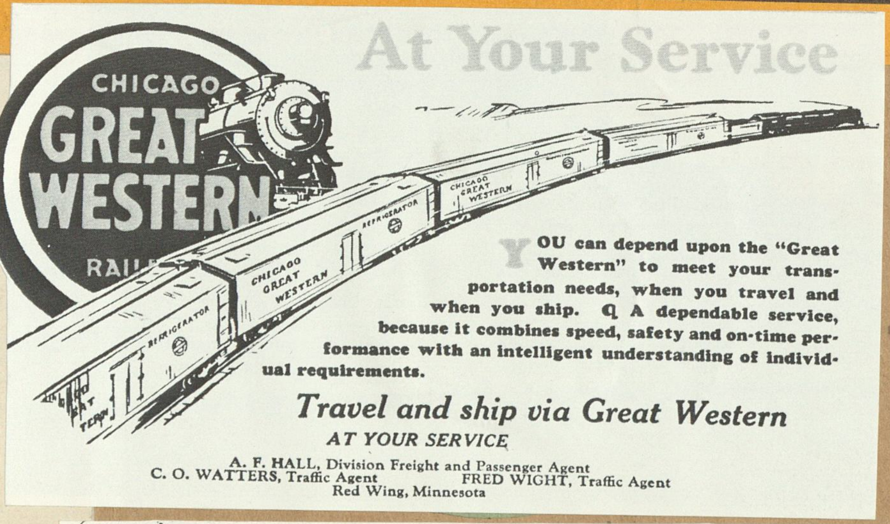
## At Your Service


CHICAGO
GREAT
WESTERN
RAIL
CHICAGO GREAT WESTERN
REFRIGERATOR

**YOU can depend upon the "Great Western" to meet your transportation needs, when you travel and when you ship. ¶ A dependable service, because it combines speed, safety and on-time performance with an intelligent understanding of individual requirements.**

*Travel and ship via Great Western*
*AT YOUR SERVICE*

A. F. HALL, Division Freight and Passenger Agent
C. O. WATTERS, Traffic Agent FRED WIGHT, Traffic Agent
Red Wing, Minnesota

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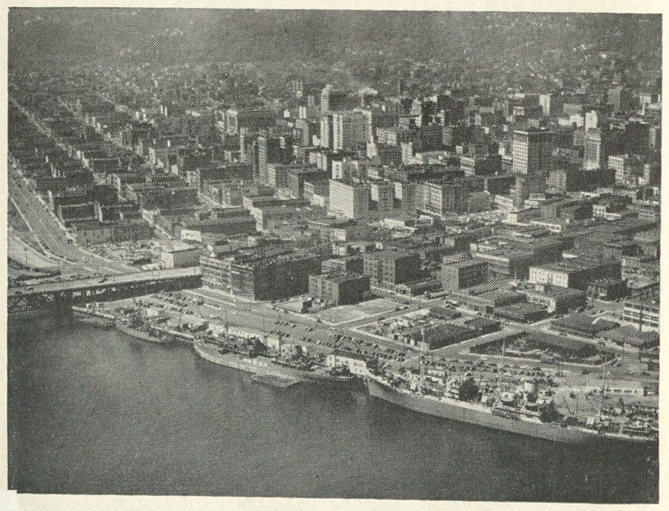

Portland—the Rose City

**SPOKANE, PORTLAND & SEATTLE RAILWAY CO.**

**Vital Link Between**
**SPOKANE, PORTLAND & CALIFORNIA**
**Portland, Pasco, Spokane and East**

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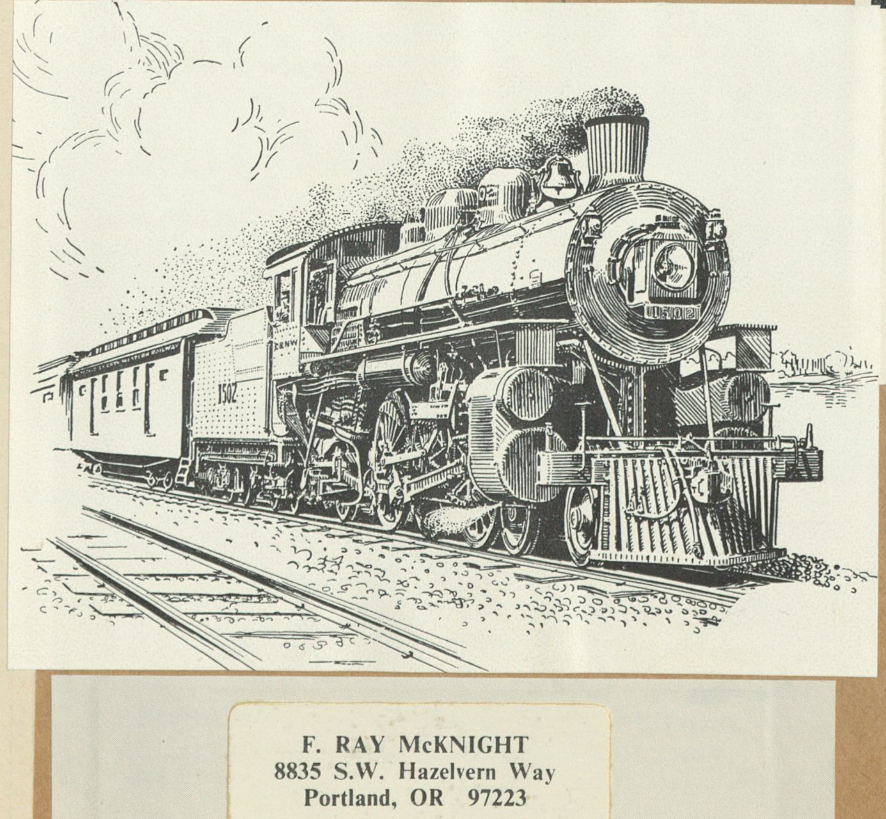

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F. RAY McKNIGHT
8835 S.W. Hazelvern Way
Portland, OR 97223

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DONATED TO THE RAILWAY &
LOCOMOTIVE HISTORICAL
SOCIETY.
NOVEMBER 29, 1986

## TRAVEL
BY
## TRAIN

*For SAFETY COMFORT and ECONOMY*

**One Way**

**2** CENTS A MILE in coaches.

**2¼** CENTS A MILE in tourist sleeping cars west of the Twin Cities. Space in sleeping cars extra.

**3** CENTS A MILE in standard sleeping or parlor cars. Space extra.

**Round Trip**

A material saving in the purchase of round trip tickets. Please ask your local agent about

REDUCED ROUND TRIP FARES

**Liberal Return Limits**

1940

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CHICAGO GREAT WESTERN
CORN BELT ROUTE
RAILWAY COMPANY

## TIME TABLES

◆

Chicago
Dubuque
Rochester
St. Paul
Minneapolis
and the
Northwest

◆

## CHICAGO GREAT WESTERN

Form 1—15M Revised to September 15, 1947 (Printed in U. S. A.) No. 149

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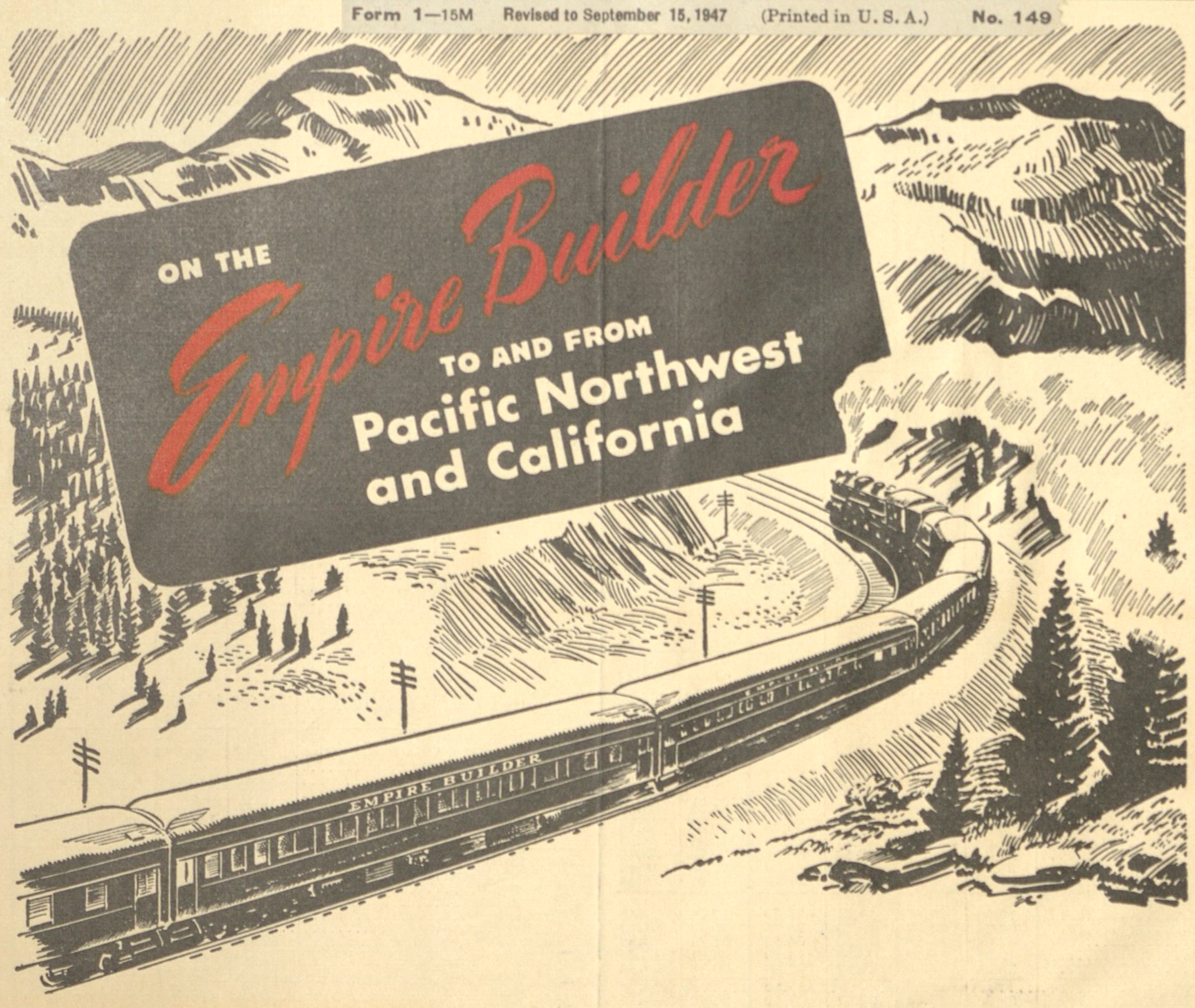

●You will always remember the enjoyment of travel on this famous train. The EMPIRE BUILDER, west and eastbound, follows historical trails across the Great Plains, through the Montana Rockies, along the southern border of Glacier National Park in Montana, the fir-clad Cascades in Washington and along the shore of Puget Sound.

GREAT NORTHERN RAILWAY

*Route of the Empire Builder*

BETWEEN CHICAGO, ST. PAUL, MINNEAPOLIS, SPOKANE, SEATTLE, TACOMA, PORTLAND, VANCOUVER, B. C., AND CALIFORNIA

Form 6017 10-46

**SOON... A COMPLETELY NEW EMPIRE BUILDER**

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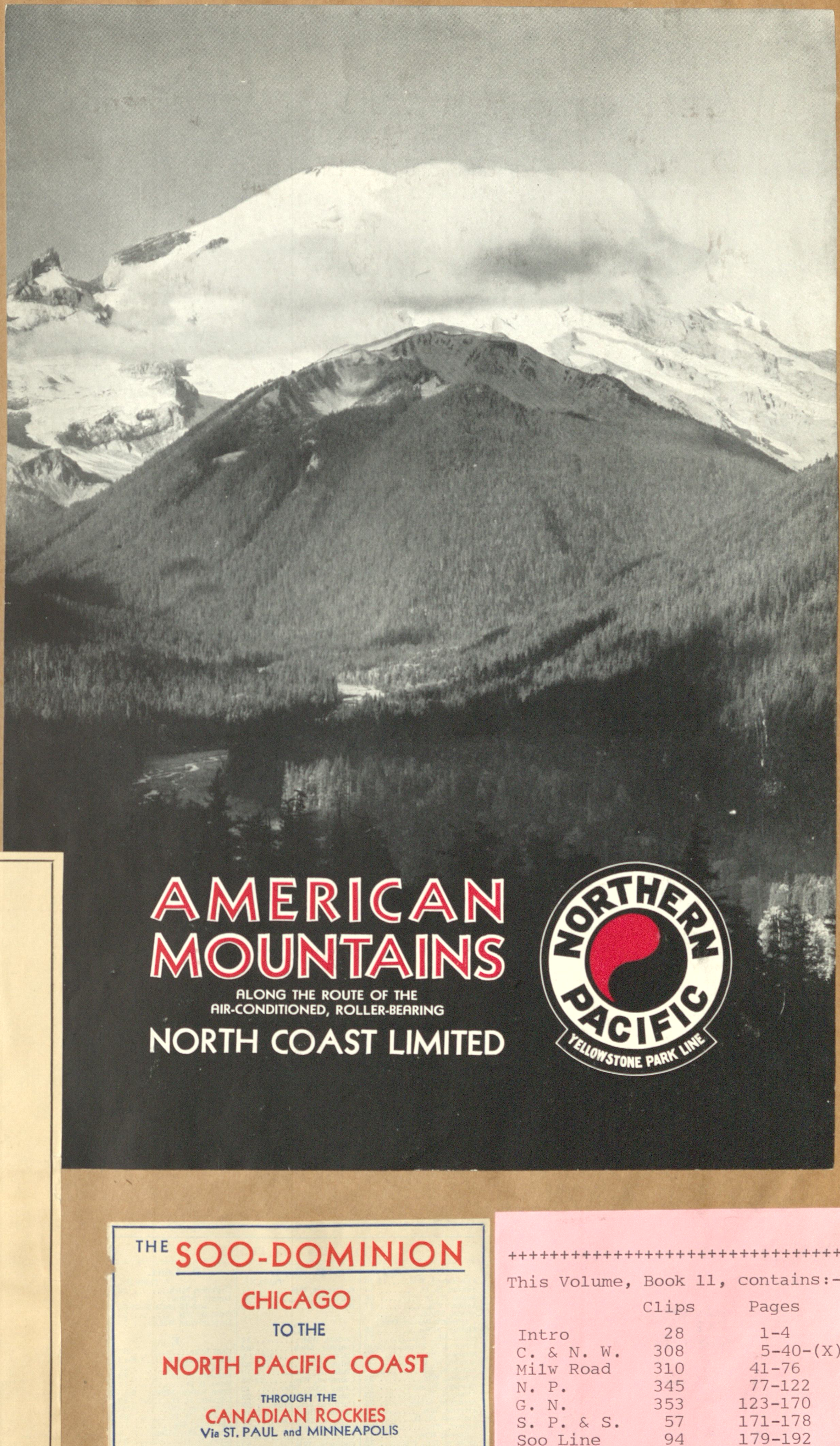

## AMERICAN MOUNTAINS

ALONG THE ROUTE OF THE AIR-CONDITIONED, ROLLER-BEARING

NORTH COAST LIMITED

NORTHERN PACIFIC
YELLOWSTONE PARK LINE

---

## THE SOO-DOMINION

CHICAGO
TO THE
NORTH PACIFIC COAST

THROUGH THE
CANADIAN ROCKIES
Via ST. PAUL and MINNEAPOLIS

[C. & N. W., SOO LINE and CANADIAN PACIFIC RY.
C. & N. W. to St. Paul, Soo Line to Portal, C. P. Ry. to Vancouver.]
C. P S. S. LINE VANCOUVER to VICTORIA and SEATTLE

### EQUIPMENT

Observation, Parlor and Dining Car, Chicago, St. Paul and Minneapolis.
Standard Drawing Room Compartment Sleeper, St. Paul, Minneapolis and Vancouver.
Tourist Sleeper; St. Paul, Minneapolis and Vancouver.
Lounge Car — Dining Car — Coaches.

ALL REGULARLY ASSIGNED CARS AIR-CONDITIONED.

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This Volume, Book 11, contains:-

|  | Clips | Pages |
|---|---|---|
| Intro | 28 | 1-4 |
| C. & N. W. | 308 | 5-40-(X) |
| Milw Road | 310 | 41-76 |
| N. P. | 345 | 77-122 |
| G. N. | 353 | 123-170 |
| S. P. & S. | 57 | 171-178 |
| Soo Line | 94 | 179-192 |
| M. & St L. | 58 | 193-199 |
| C. G. W. | 66 | 201-208 |
|  | 1,619 | 208 |

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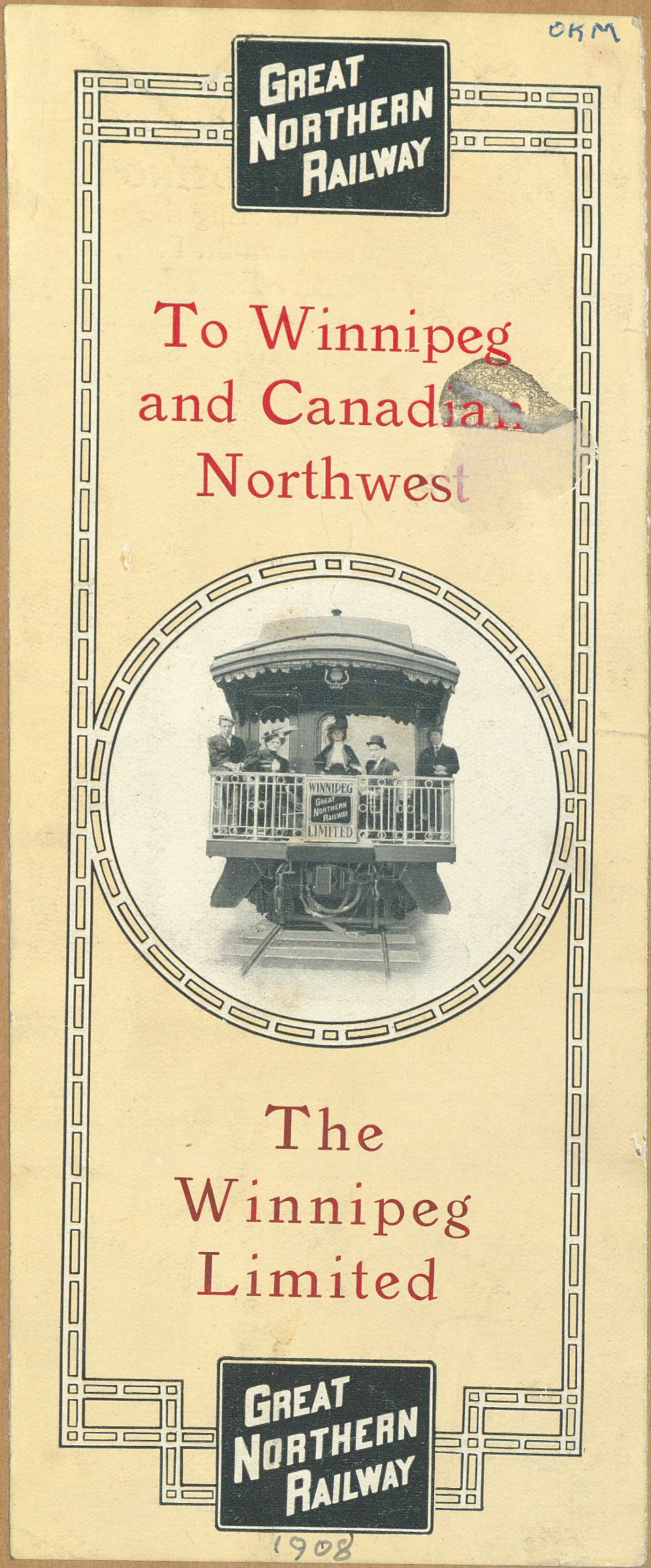

OKM

**GREAT NORTHERN RAILWAY**

To Winnipeg and Canadian Northwest

The Winnipeg Limited

**GREAT NORTHERN RAILWAY**

1908

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SUMMER, 1938

GREAT NORTHERN RAILWAY

## TIME TABLES

## ROUTE OF THE *Air Conditioned* EMPIRE BUILDER

PRINTED IN U. S. A.

GLACIER NATIONAL PARK

---

"The Northern Pacific must be built, both as an economic and military necessity. The West can never be settled, nor protected, without the railroad." So said General William T. Sherman. Thus it has been just a hundred years since the NorthWest received its first rail connection with the outside world, and, the vast territory "beyond the shining mountains" was open to the influx of 'civilization'!!?

---

**WESTERN RAILWAYS' COMMITTEE ON PUBLIC RELATIONS**

105 West Adams Street, Chicago. 1940

**J. E. GORMAN**, Trustee, Chicago, Rock Island & Pacific Railway, Chairman.

**P. G. OTTERBACK**, Assistant to Chairman.

**E. J. ENGEL**, President, Atchison, Topeka & Santa Fe Ry.
**R. L. WILLIAMS**, Chief Executive Officer, Chicago & Northwestern Ry.
**RALPH BUDD**, President, Chicago, Burlington & Quincy R. R.
**H. A. SCANDRETT**, Trustee, Chicago, Mil., St. P. & Pac. R. R.
**J. L. BEVEN**, President, Illinois Central System.
**A. D. McDONALD**, President, Southern Pacific Co.
**W. M. JEFFERS**, President, Union Pacific Railroad.

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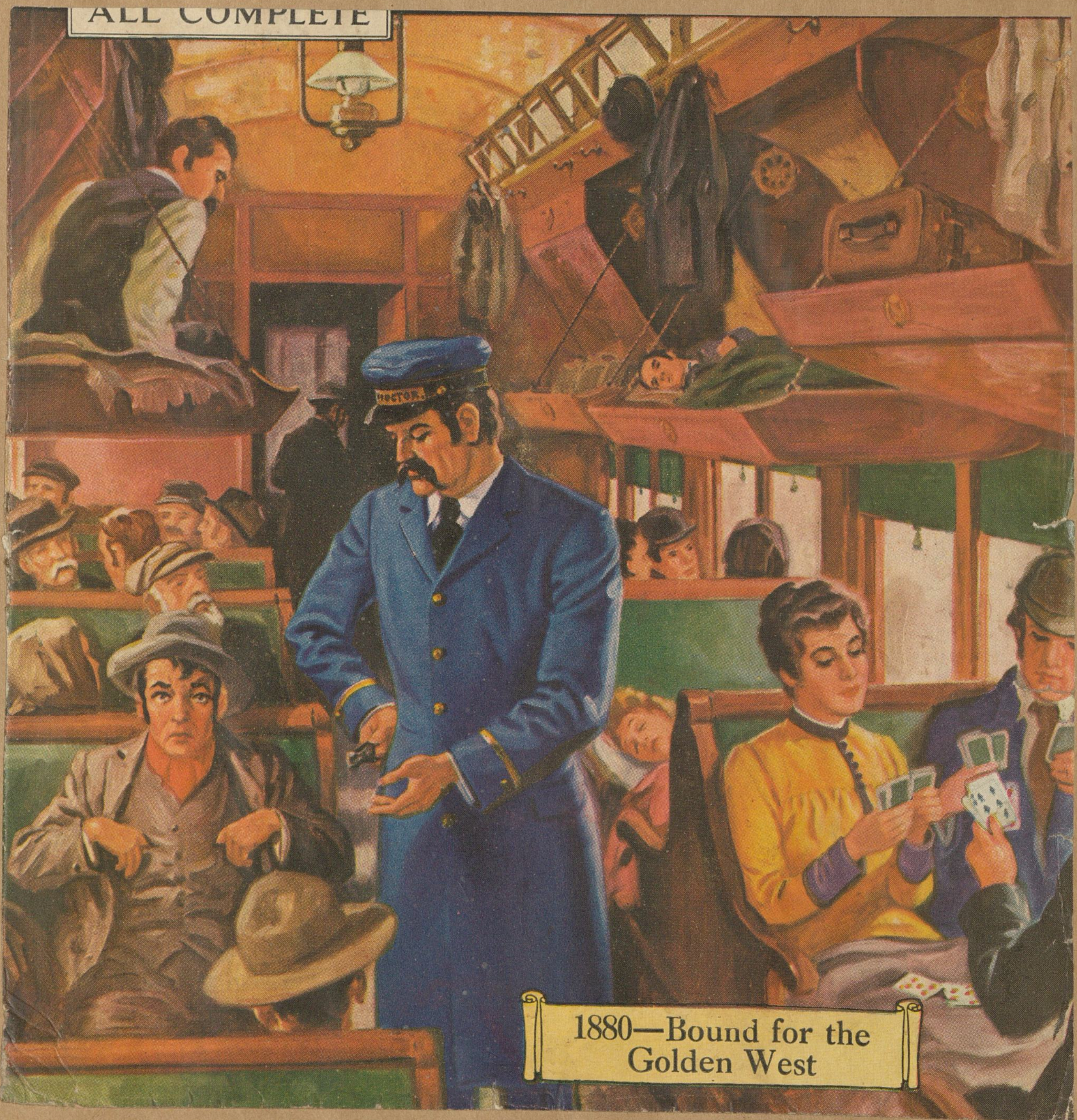

1880—Bound for the Golden West

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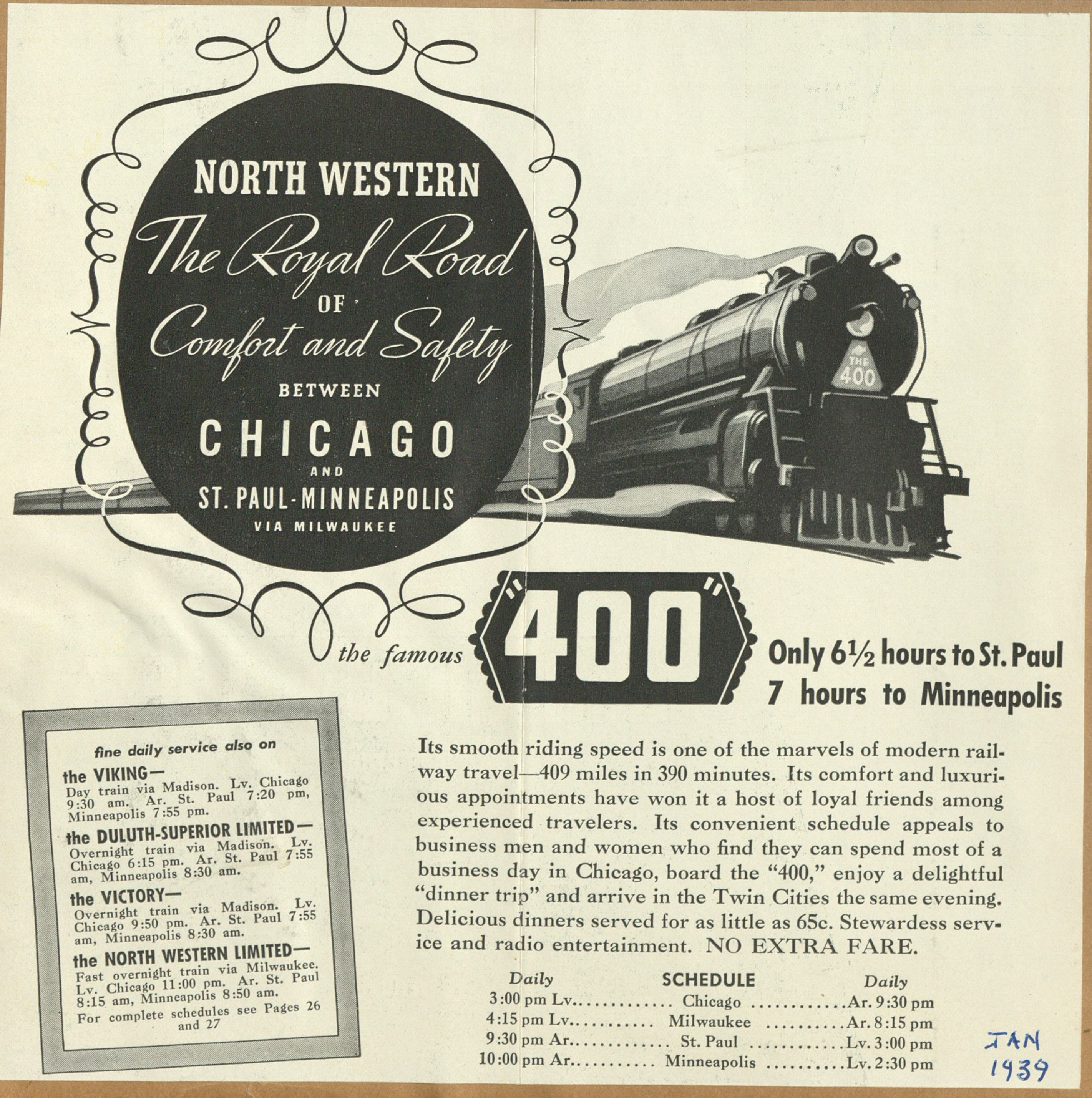

NORTH WESTERN

*The Royal Road* OF *Comfort and Safety*

BETWEEN

CHICAGO AND ST. PAUL-MINNEAPOLIS

VIA MILWAUKEE

*the famous* "400"

**Only 6½ hours to St. Paul**
**7 hours to Minneapolis**

*fine daily service also on*

**the VIKING—** Day train via Madison. Lv. Chicago 9:30 am. Ar. St. Paul 7:20 pm, Minneapolis 7:55 pm.

**the DULUTH-SUPERIOR LIMITED—** Overnight train via Madison. Lv. Chicago 6:15 pm. Ar. St. Paul 7:55 am, Minneapolis 8:30 am.

**the VICTORY—** Overnight train via Madison. Lv. Chicago 9:50 pm. Ar. St. Paul 7:55 am, Minneapolis 8:30 am.

**the NORTH WESTERN LIMITED—** Fast overnight train via Milwaukee. Lv. Chicago 11:00 pm. Ar. St. Paul 8:15 am, Minneapolis 8:50 am.

For complete schedules see Pages 26 and 27

Its smooth riding speed is one of the marvels of modern railway travel—409 miles in 390 minutes. Its comfort and luxurious appointments have won it a host of loyal friends among experienced travelers. Its convenient schedule appeals to business men and women who find they can spend most of a business day in Chicago, board the "400," enjoy a delightful "dinner trip" and arrive in the Twin Cities the same evening. Delicious dinners served for as little as 65c. Stewardess service and radio entertainment. NO EXTRA FARE.

| *Daily* | **SCHEDULE** | *Daily* |
|---|---|---|
| 3:00 pm Lv. | Chicago | Ar. 9:30 pm |
| 4:15 pm Lv. | Milwaukee | Ar. 8:15 pm |
| 9:30 pm Ar. | St. Paul | Lv. 3:00 pm |
| 10:00 pm Ar. | Minneapolis | Lv. 2:30 pm |

JAN 1939

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EVERY WEEK END!

1 Fare Plus 25c

For the Round Trip
Between All Points on

**The MILWAUKEE ROAD**

East of Montana

Go Friday or Saturday, also on Sunday to points where regular one-way fare is $7.20 or less. Return to reach starting point by midnight Tuesday after date of sale.

1932

GOOD IN COACHES, ALSO SLEEPING AND PARLOR CARS ON PAYMENT FOR SPACE OCCUPIED

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Where construction number (c/n) is shown it is for the engine illustrated. Type written captions are mine.

(Ed.)

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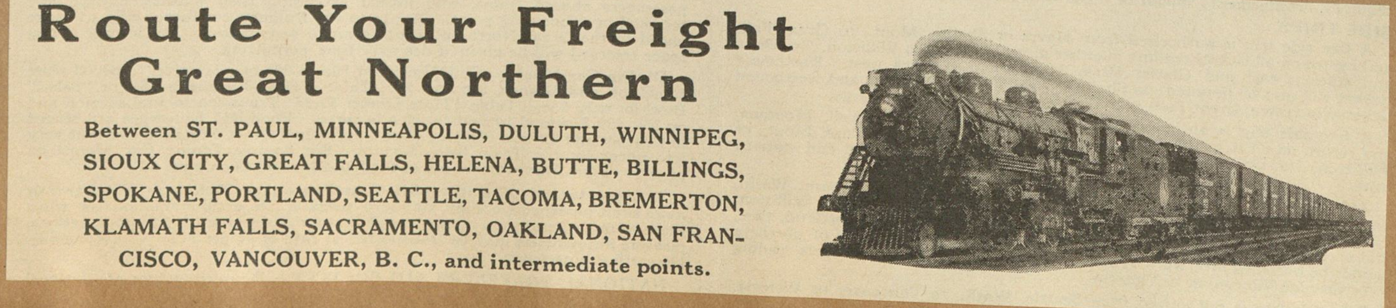

**Route Your Freight Great Northern**

Between ST. PAUL, MINNEAPOLIS, DULUTH, WINNIPEG, SIOUX CITY, GREAT FALLS, HELENA, BUTTE, BILLINGS, SPOKANE, PORTLAND, SEATTLE, TACOMA, BREMERTON, KLAMATH FALLS, SACRAMENTO, OAKLAND, SAN FRANCISCO, VANCOUVER, B. C., and intermediate points.

# Northern Pacific Rivers

. . . Pictures all the Way . . . Great Swift Waters . . . Forested Shores . . . Rugged Bluffs . . . Cataracts . . . River Birds . . . Clear, Ice-cold Mountain Streams plunging from the Woods . . . Deep Gorges . . . Bridges

## 1,406 Miles of Rivers, Chicago to Seattle

For 1,406 miles, two-thirds of the distance between Chicago and Seattle-Tacoma on the North Pacific Coast, the North Coast Limited of the Northern Pacific Railway travels along the banks of some of the most picturesque rivers in America. It is indeed a route of "startling beauty." Rivers of Minnesota, fed by 10,000 lakes; rivers of Dakota, through wheat fields and the colorful Bad Lands; rivers of Montana, across vast cattle ranches and into the Rockies; rivers of Idaho, with mountains climbing high overhead; rivers of Washington, which bring life to great orchards; and the *Columbia,* Oregon's own.

¶ After leaving the new Chicago Union Station on the C., B. & Q., the New North Coast Limited follows the Mississippi River, "Father of Waters," for 383 miles; the historic Yellowstone is followed for 341 miles; the Missoula River, through the most impressive portion of Montana's "Shining Mountains," 106 miles; the Clark's Fork, from Montana into the lofty Idaho Rockies, 93 miles; and the Yakima River, through great, volcanic lava beds and contrasting, blossom-spread valleys in Washington, 141 miles.

¶ Travelers going direct from Spokane to Seattle, follow the Columbia River for 7 miles; if they go from Spokane to Portland, the Columbia is followed for 220 miles.

¶ Other streams which Northern Pacific main line trains follow, cross and re-cross, are:

- Rum River
- Elk River
- Little Rock River
- Platte River
- Little Elk River
- Fish Trap River
- Long Prairie River
- Wing River
- Leaf River
- Otter Tail River
- North Branch of Buffalo River
- Red River of the North
- Sheyenne River
- Maple River
- James River
- Pipestem River
- Missouri River
- Heart River
- Knife River
- South branch of Heart River
- Little Missouri River
- Powder River
- Tongue River
- Big Horn River
- Gallatin River
- Little Blackfoot River
- Madison River
- Jefferson River
- Boulder River
- Deer Lodge River
- Hellgate River
- Big Blackfoot River
- St. Regis River
- Jocko River
- Flathead River
- Thompson River
- Pack River
- Pend d'Oreille River and Lake
- Spokane River
- Columbia River
- Natchez River
- Cle Elum River
- Green River
- White River
- Black River

*We invite you to follow the River Route when traveling between Chicago and the Pacific Coast.*

## North Coast Limited

*Completely Air-Conditioned*

E. E. Nelson,
Pass. Traffic Manager,
ST. PAUL, MINN.

CHICAGO—ST. PAUL—MINNEAPOLIS—DULUTH—SUPERIOR—MINNESOTA'S 10,000 LAKES—FARGO—BISMARCK—DAKOTA BAD LANDS ("Roosevelt Park")—BILLINGS—YELLOWSTONE PARK—LIVINGSTON—BOZEMAN—HELENA—BUTTE—MISSOULA—SAND POINT—SPOKANE—YAKIMA—SEATTLE—TACOMA—PORTLAND—VANCOUVER—VICTORIA.

Passenger Offices in Most Large Cities

6077

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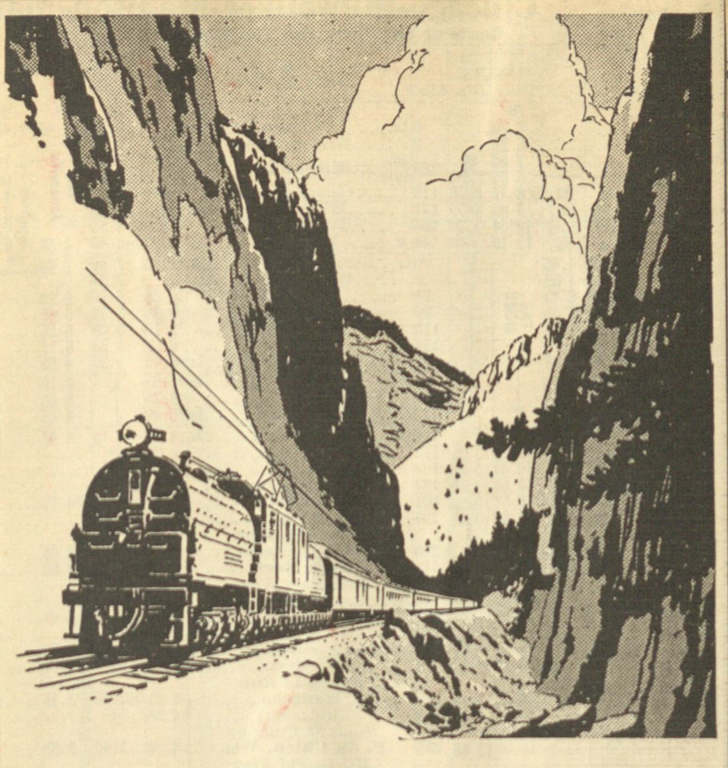

## Vacation thrills galore

### on the great scenic route to the PACIFIC NORTHWEST

Winding beneath the rocky battlements of Montana Canyon . . . soaring over the Continental Divide of the Rockies . . . traveling through a series of spectacular "switchbacks" and tunnels in the Bitter Roots, the trail of the OLYMPIAN is truly the great scenic route. Open observation cars through the electrified zones in the mountains—a joy for the candid camera fans.

Make your headquarters in the seaport cities of Seattle or Tacoma. See Mt. Baker, Mt. Rainier, and the wild Olympic Peninsula. Cruise on Puget Sound to British Columbia or take the "inside passage" to Alaska. Stop off at Yellowstone en route east or west.

**LOW SUMMER FARES**

Pay-as-you-go or travel on the prepaid expense plan with everything arranged for.

**THE *OLYMPIAN* AIR CONDITIONED —ELECTRIFIED**

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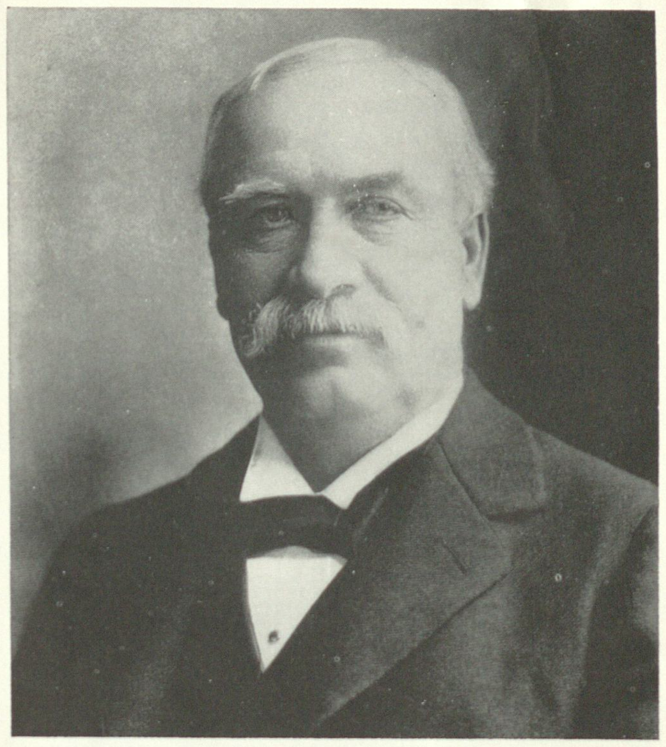

HENRY VILLARD, the shrewd old German who welded together a network of rails to form one of the great transportation lines in the Pacific Northwest. His famous "blind pool" is still a legend in financial circles, a coup that gave him control of the Northern Pacific. (Courtesy of Oregon Historical Society).

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Clippings initialed "OKM" are
those salvaged from a former
scrapbook of my father

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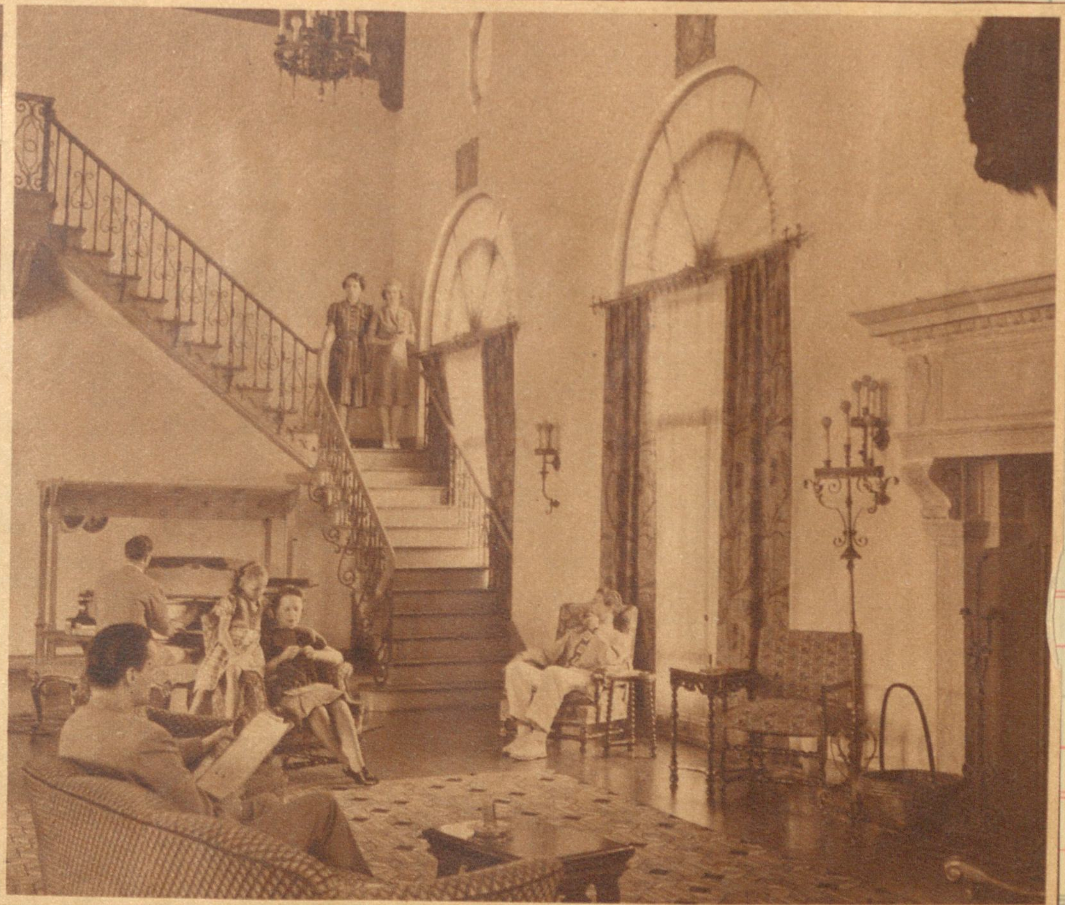

In the heart of the lovely Gallatin Valley, The Milwaukee Road's hospitable Gallatin Gateway Inn is headquarters for Rocky Mountain recreational activities. Fishing, riding, pack trips and motor trips to dude ranches, cattle ranges, Morrison Cave and to historic Virginia City are highlights of the program for Inn guests.

Courtesy of THE MILWAUKEE ROAD.

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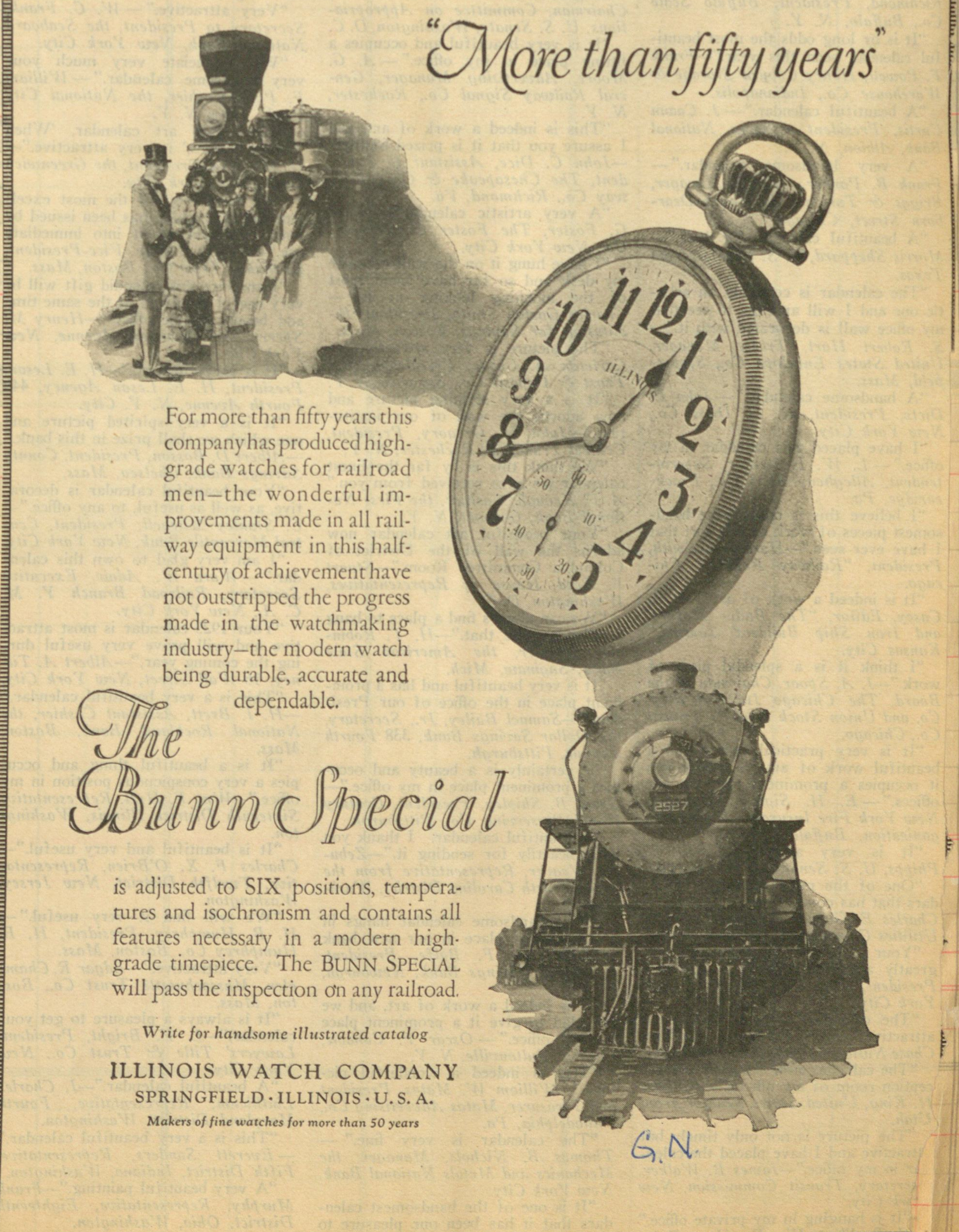
*New York Central Lines Magazine for March, 1928*



## "More than fifty years"

For more than fifty years this company has produced high-grade watches for railroad men—the wonderful improvements made in all railway equipment in this half-century of achievement have not outstripped the progress made in the watchmaking industry—the modern watch being durable, accurate and dependable.

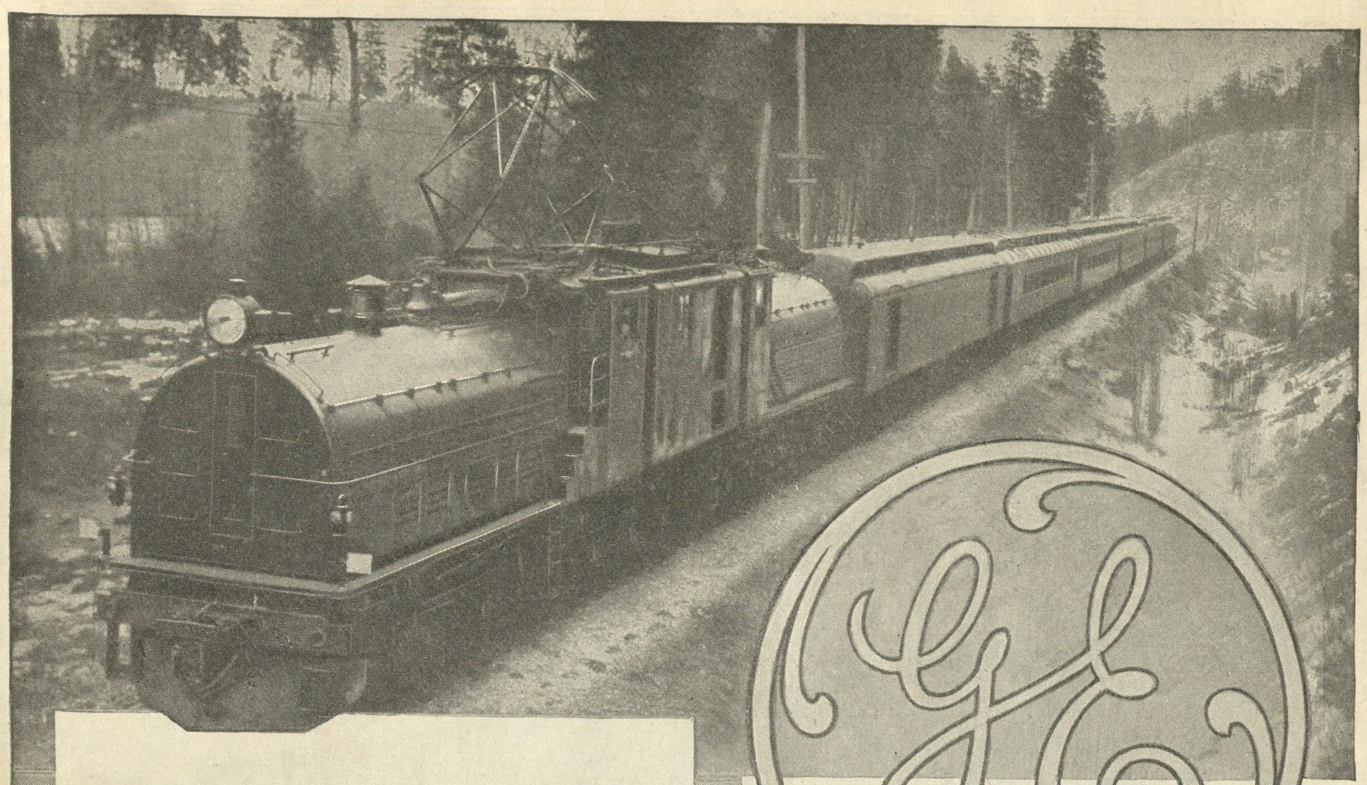
## The Bunn Special

is adjusted to SIX positions, temperatures and isochronism and contains all features necessary in a modern high-grade timepiece. The BUNN SPECIAL will pass the inspection on any railroad.

*Write for handsome illustrated catalog*

ILLINOIS WATCH COMPANY
SPRINGFIELD · ILLINOIS · U. S. A.
*Makers of fine watches for more than 50 years*

G. N.



*"..... No grinding, no jerking, no puffing, no pulling, no straining, no disturbed slumbers—just a keen sense of moving swiftly, of being propelled by power vastly in excess of requirements. You ride with ease—you are at ease—it is the very last word in transportation."*

*—Edison.*

## SPEED *and* COMFORT

On the Chicago, Milwaukee and St. Paul Railway over the Cascade Range, the G-E 265-ton gearless electric locomotives have made electrical operation mean to the passenger *speed* and *comfort*. Up steep mountain grades the traveler speeds on his way with car windows or ventilators open and breathes clean, mountain air. On down grades regenerative braking allows the train to descend with maximum comfort and safety.

This, the world's longest electrification—649 miles—was pioneered by the General Electric Company. The same standard of achievement is at your command.

General Electric Company
Schenectady, N. Y.
SALES OFFICES IN ALL LARGE CITIES

# GENERAL ELECTRIC

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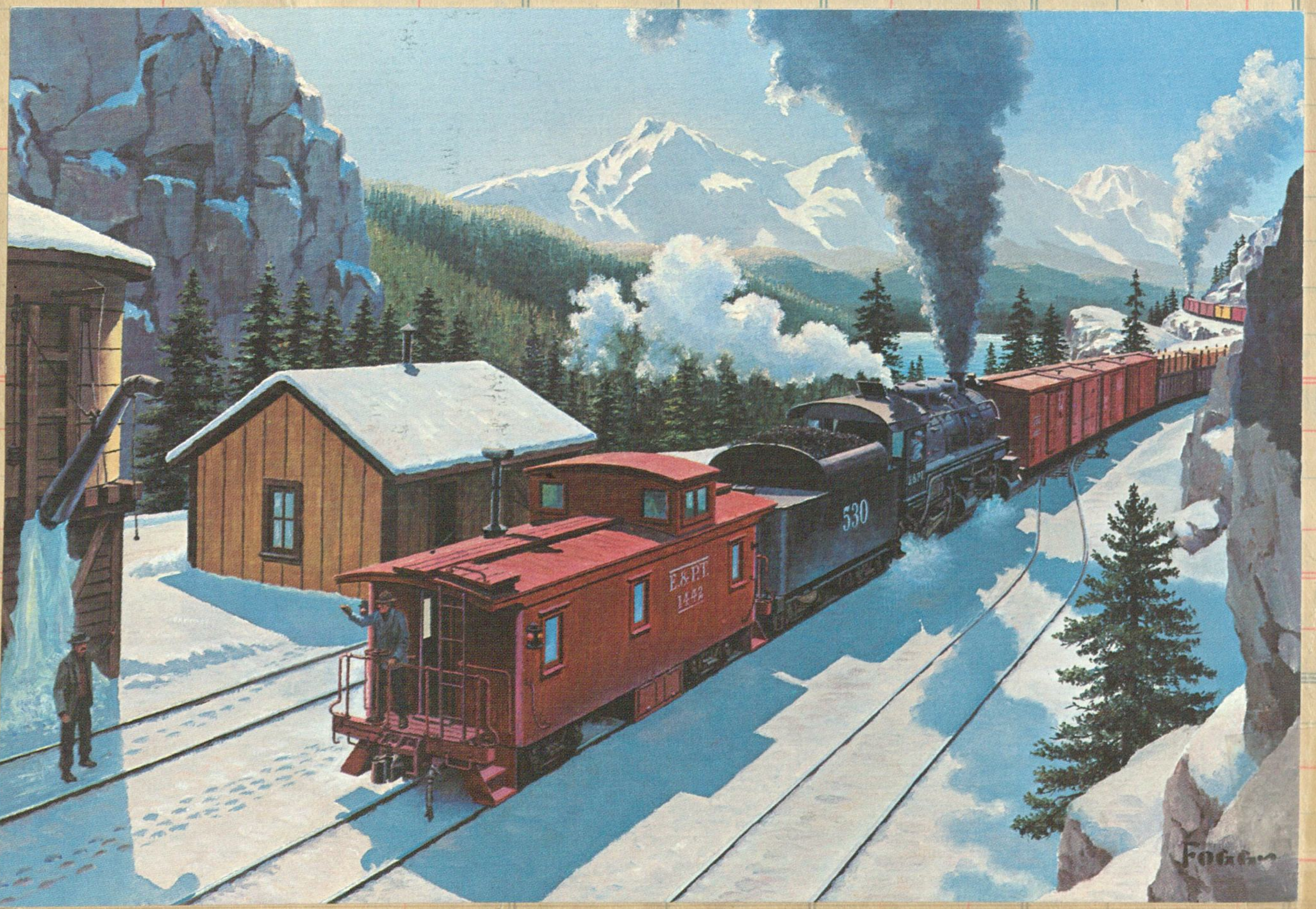

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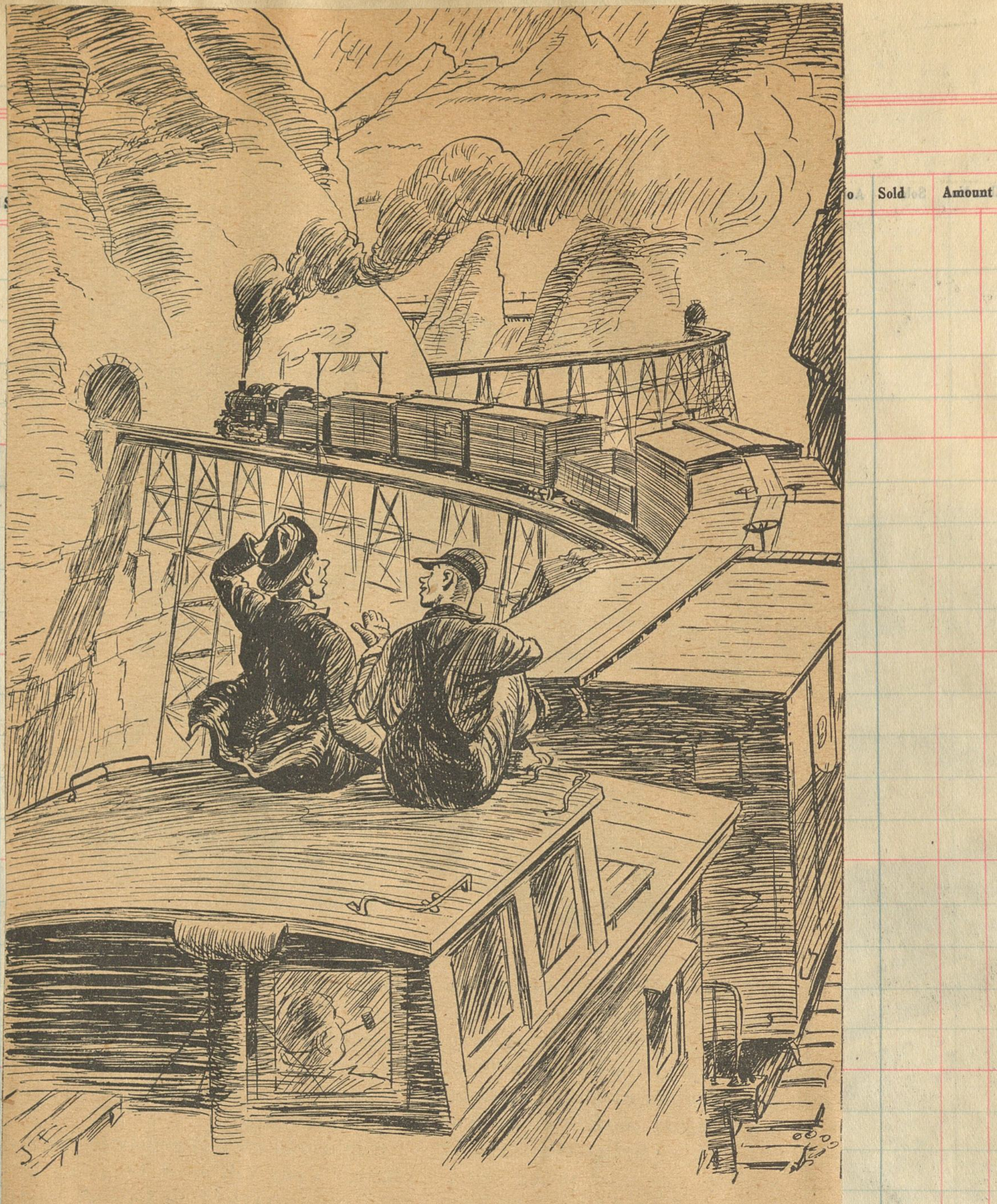


"WELL, if you worked on a roller coaster at Coney Island, you should take to this job like a duck to water!"

---

# VACATION CATALOG

## WHERE TO GO

### GLACIER PARK

Thrilling days of riding, hiking, cruising, fishing. If time is limited, take an All-Expense "Stop-Off" tour through the heart of the Park while en route to or from the—

### PACIFIC NORTHWEST

—an "Evergreen Vacationland"—opportunity to see Fort Peck Dam, Spokane, Grand Coulee Dam, Seattle, Tacoma, Portland, Bonneville Dam, Mt. Hood, Rainier National Park, Mt. Baker National Forest, Vancouver and Victoria, B. C.

### ALASKA

—"Land of Adventure and Romance" . . . reached via comfortable ships from Seattle or Vancouver . . . 9 or 12 fascinating vacation days on Sheltered Seas to Alaska's romantic ports.

### CALIFORNIA

—"Tropical Nights—Beauty and Romance" . . . a thousand things to see, and do! A thrilling down-the-coast trip from Seattle or Portland on the famous Shasta Route.

## HOW TO GO

### EMPIRE BUILDER

The luxurious Air-Conditioned train offering 1600 Clean, Cinderless Scenic miles behind giant Electric and Oil-Burning Locomotives. Every Comfort . . . Every Economy . . . East or West.

### STANDARD SLEEPING CARS

Air-Conditioned equipment throughout . . . Standard Pullman Sleeping Cars with Drawing Room and Compartments . . . Pullman Tourist Sleeping Cars . . . and new Luxury Coaches.

### DOUBLE BEDROOMS

All the privacy of a compartment at lower cost . . . with upper and lower berths, desk-dining table . . . ice water, lavatory, toilet, and ample baggage space . . . hotel comfort and service!

### FAMOUS FOR MEALS

Empire Builder Dining Cars are pleasing to the eye . . . appealing to the appetite. Inexpensive a la carte and table d'hote meals . . . in fact, complete meals for as little as 50c.

## LOW SUMMER FARES

NOW IN EFFECT . . . Ask Great Northern representative or any Travel Agent to plan your trip on the Empire Builder. Low-Cost All-Expense Tours now available covering western Vacationlands.

GREAT NORTHERN RAILWAY

## EMPIRE BUILDER

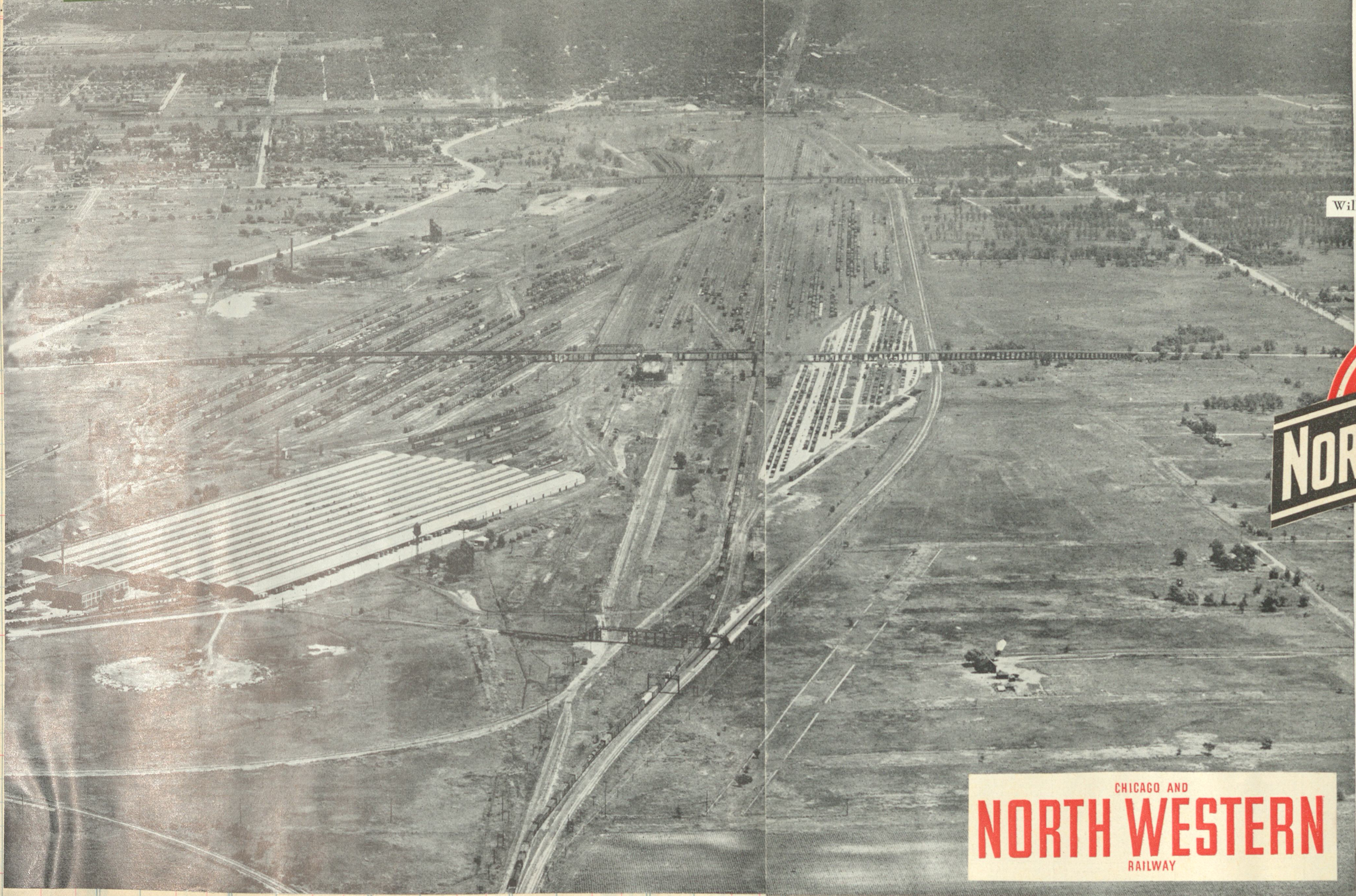
AIR-CONDITIONED . . . between CHICAGO, ST. PAUL, MINNEAPOLIS, GLACIER PARK, SPOKANE, SEATTLE, TACOMA, PORTLAND, VANCOUVER and VICTORIA, B. C., with connections for CALIFORNIA, ALASKA and the ORIENT

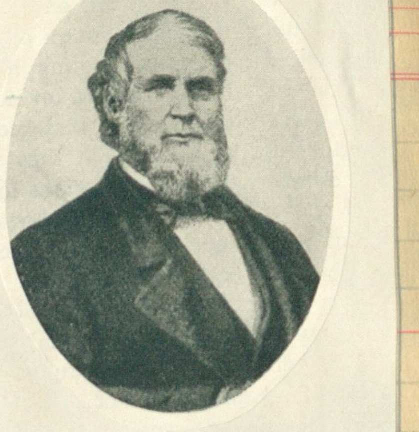
FORM 6017

1938

5

# Chicago and North Western





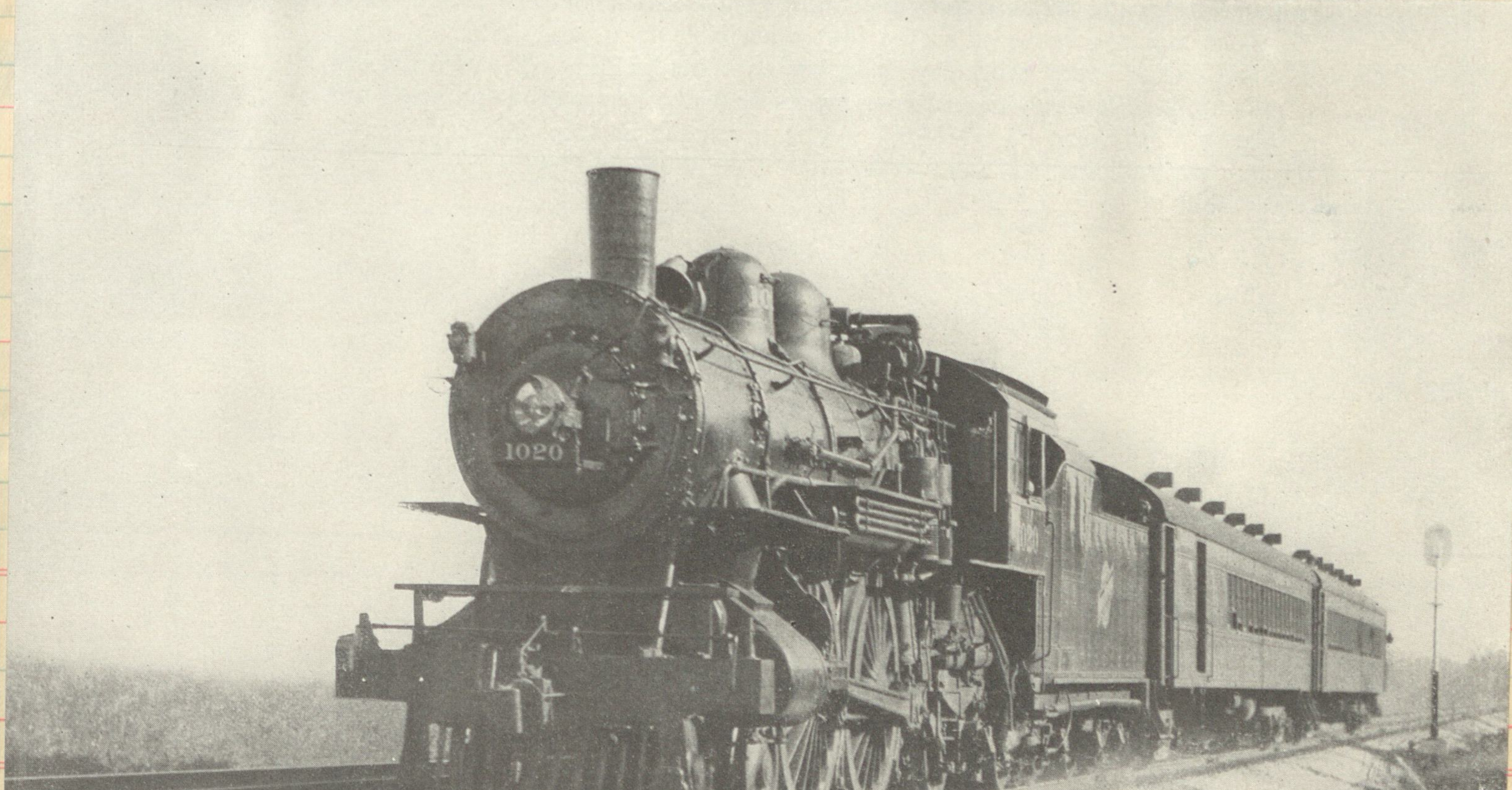
William B. Ogden, first C&NW president.

CHICAGO
AND
NORTH WESTERN
LINE

Chicago & North Western's Proviso Yard handles an average of 128 freight trains a day, and it's a busy spot any hour of the day or night. A good place to watch its operations is on the highway (U. S. 45) and pedestrian bridge in the center of the picture. Cars are classified on the 60 tracks at left, after rolling down an incline and through electric car retarders. The huge freight transfer house has a capacity of 720 cars under its roof; less-than-carload freight is handled here. The tracks at far right and running off bottom of the picture are the main line to Omaha. These tracks were relocated to make room for the yard; originally they ran tangent to the line in the background, where the short bridge marks the line used by the Indiana Harbor Belt and Baltimore & Ohio Chicago Terminal roads. Chicago's skyline can be seen through haze in the distance.

CHICAGO AND
NORTH WESTERN
RAILWAY

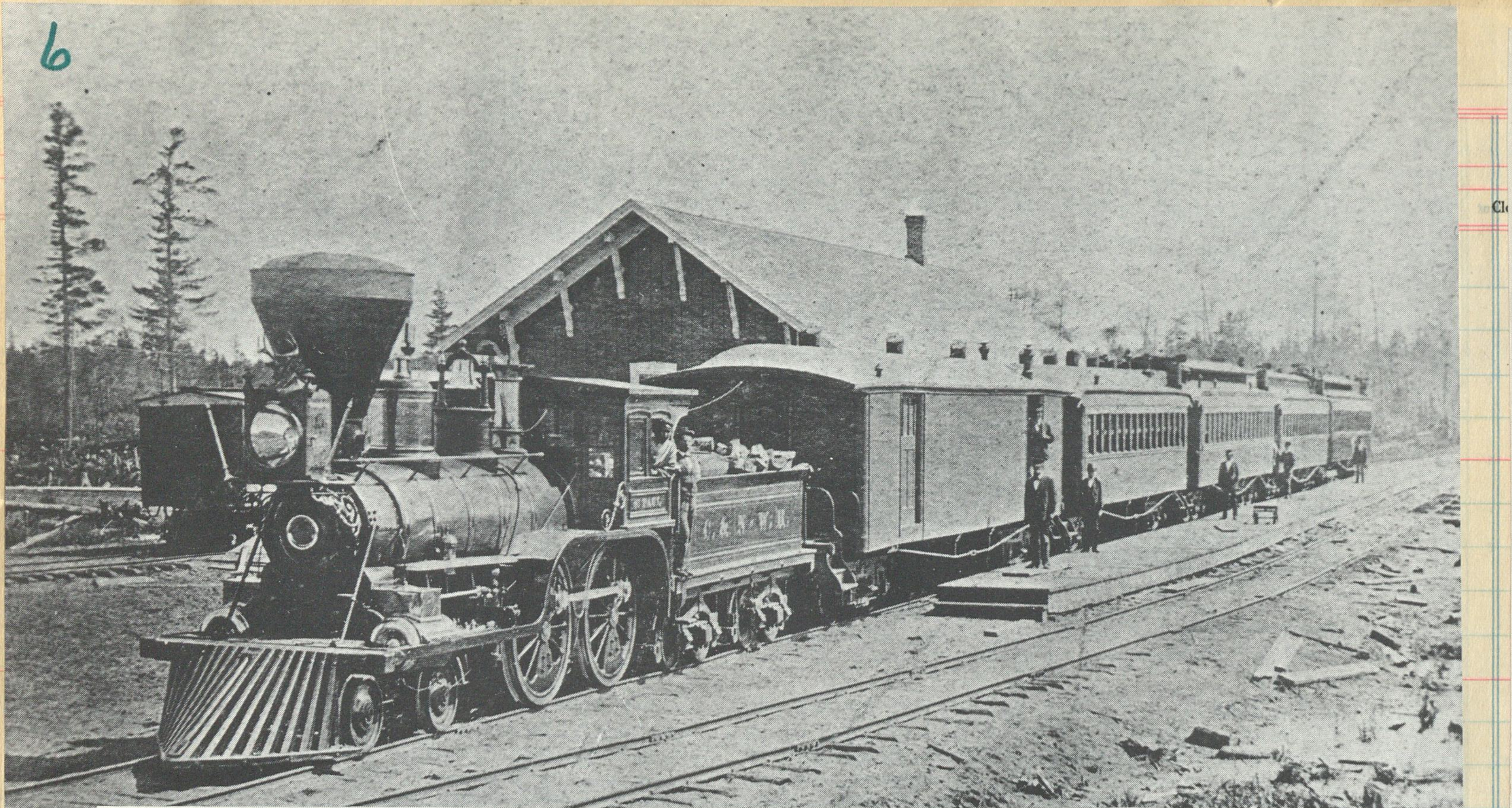
THE
NORTH-WESTERN
LINE
C.&N.W.RY
C.ST.P.M.&O.RY
S.C.&P.R.R.
F.E.&M.V.R.R.



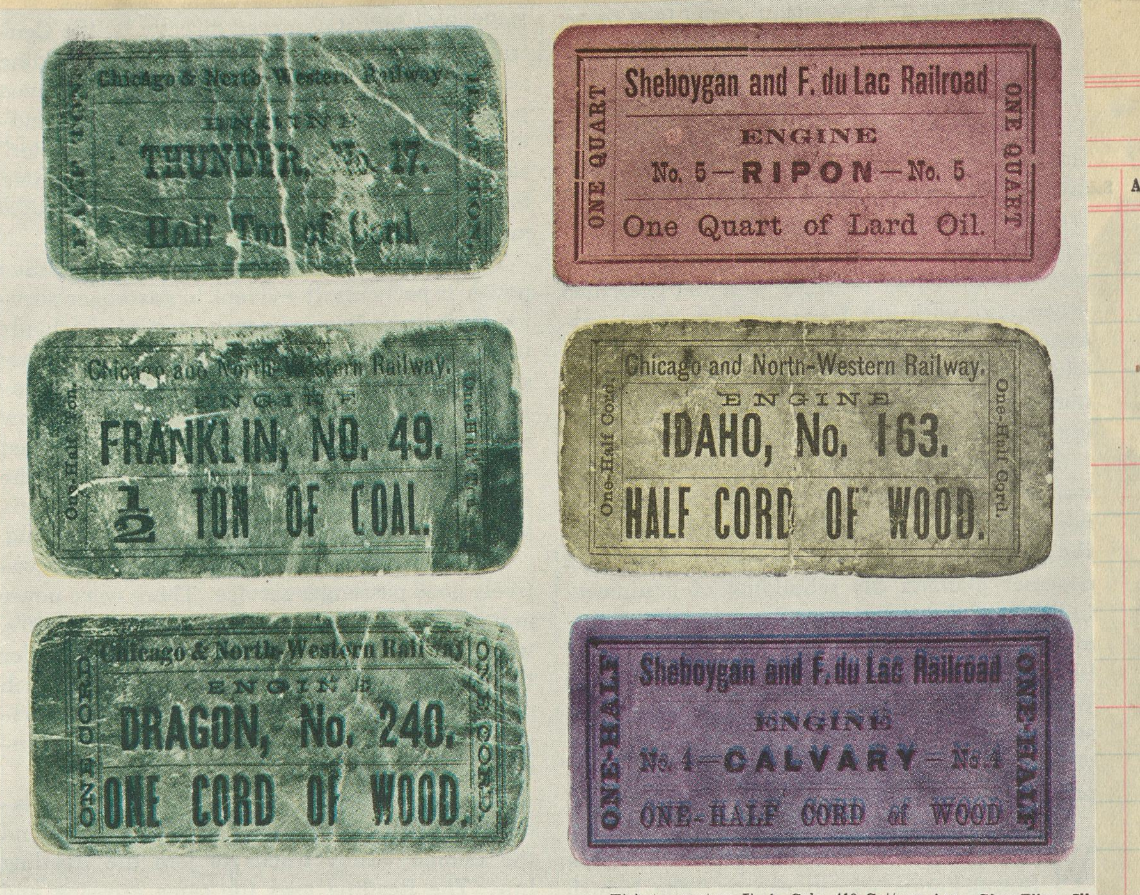
The 1020, a graceful Atlantic, glides along with two cars of commuters near Lake Forest

The
North-Western
Limited
BETWEEN
CHICAGO
ST. PAUL
MINNEAPOLIS
DULUTH
Leaves CHICAGO 6³⁰ P. M. Daily
VIA
CHICAGO AND NORTH-WESTERN RY.

In 1927 was operating 8,402 miles, with 2022 engines, 70,851 freight and 2,312 passenger cars



Engine 77, the Saint Paul, at Marinette, Wisconsin in 1871. This engine was built by the Hinkley Locomotive Works in 1855 for the Chicago, Saint Paul & Fond du Lac. The train shown here is said to be the first into Marinette, which was the temporary end of the line until construction of the line to Escanaba was completed. The depot behind the train later became the freight house, a common practice during the early period of railroad construction. Photo from the C&NWHS collection.



Chicago & North-Western Railway.
ENGINE
THUNDER, No. 17.
Half Ton of Coal
HALF TON

Sheboygan and F. du Lac Railroad
ENGINE
No. 5—RIPON—No. 5
One Quart of Lard Oil.
ONE QUART

Chicago and North-Western Railway.
ENGINE
FRANKLIN, NO. 49.
½ TON OF COAL.
One-Half Ton.

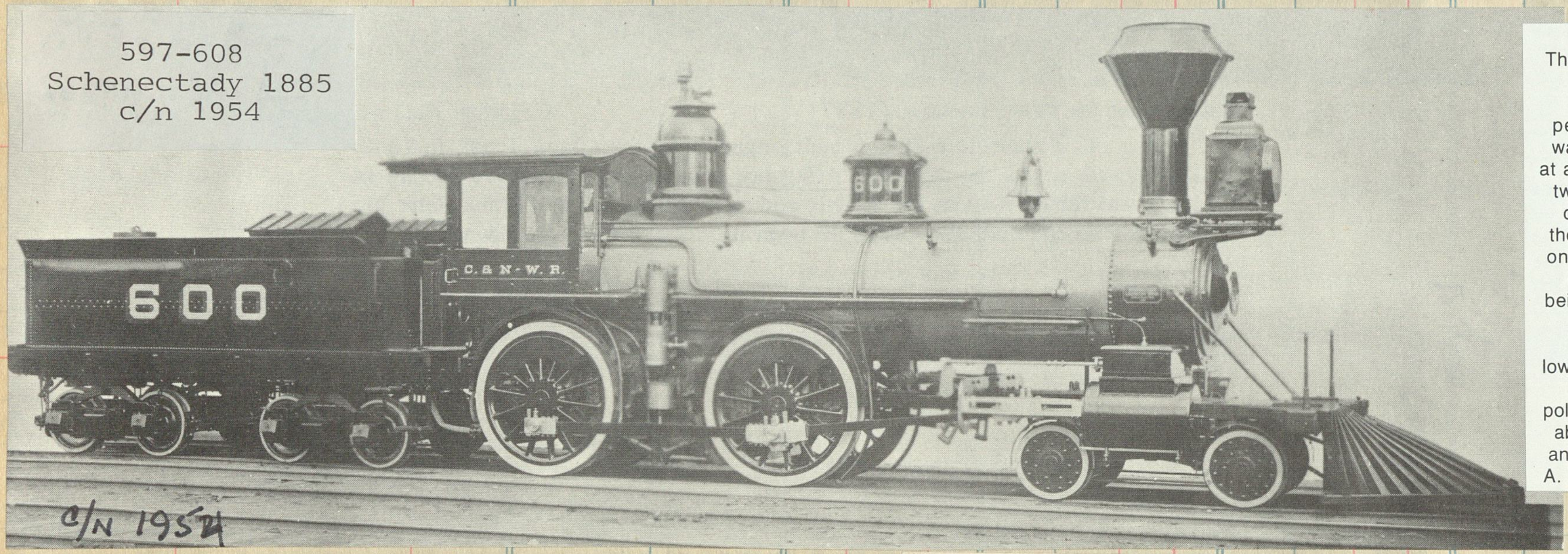
Chicago and North-Western Railway.
ENGINE
IDAHO, No. 163.
HALF CORD OF WOOD.
One-Half Cord.

Chicago & North-Western Railway
ENGINE
DRAGON, No. 240.
ONE CORD OF WOOD.
ONE CORD

Sheboygan and F. du Lac Railroad
ENGINE
No. 4—CALVARY—No. 4
ONE-HALF CORD of WOOD
ONE-HALF

Tickets courtesy F. A. Cole, 419 Cottage Ave., Glen Ellyn, Ill.

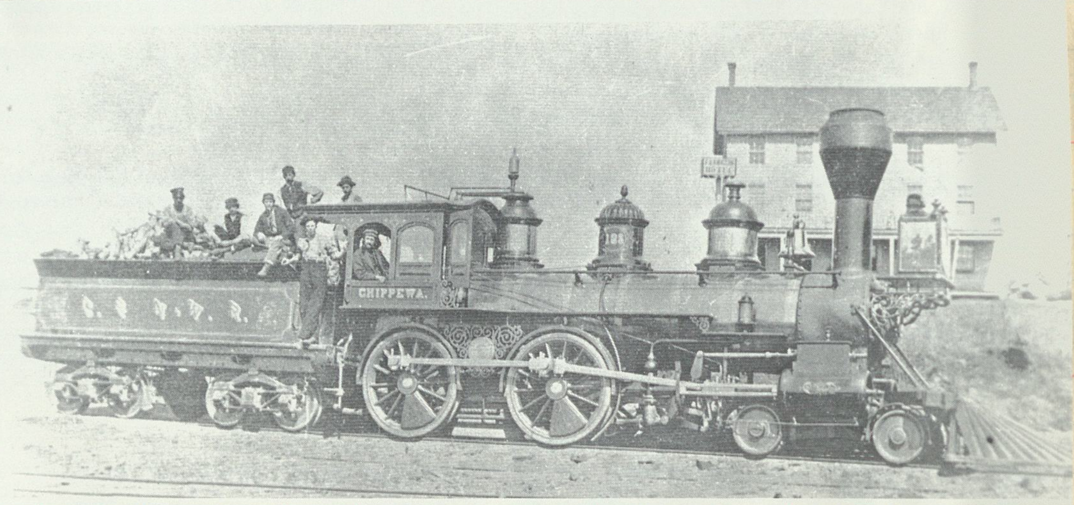
Amount Clos. No. Sold Amount

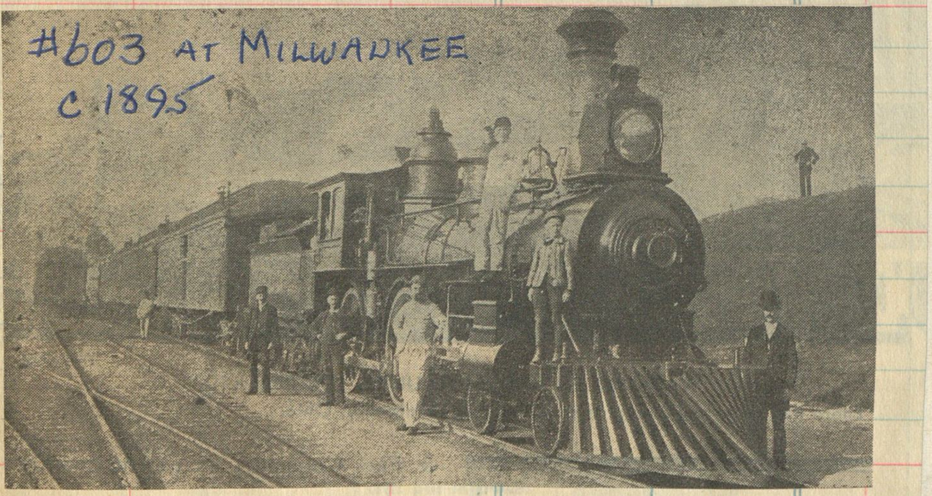


597-608
Schenectady 1885
c/n 1954

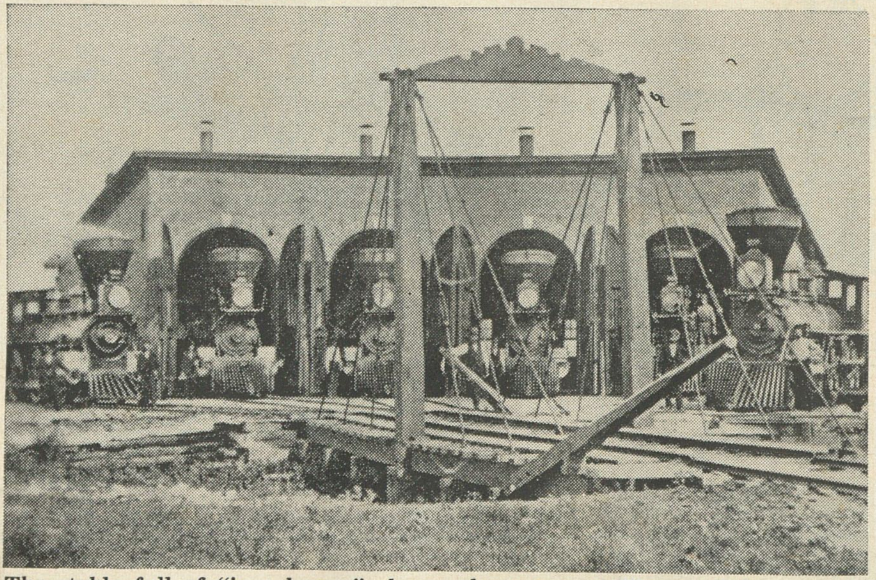
C/N 1954

The C&NW built many of it's own locomotives, engine 185, the Chippewa, an American type was constructed in 1866 at a time when the use of two steam domes was a common practice. Both the first and third domes on this engine are steam domes, the center one being for sand. This view of the Chippewa was made at Belle Plaine, Iowa, and shows she was a brightly painted and polished machine with an abundance of scrollwork and brass trim. From the A. W. Johnson collection.

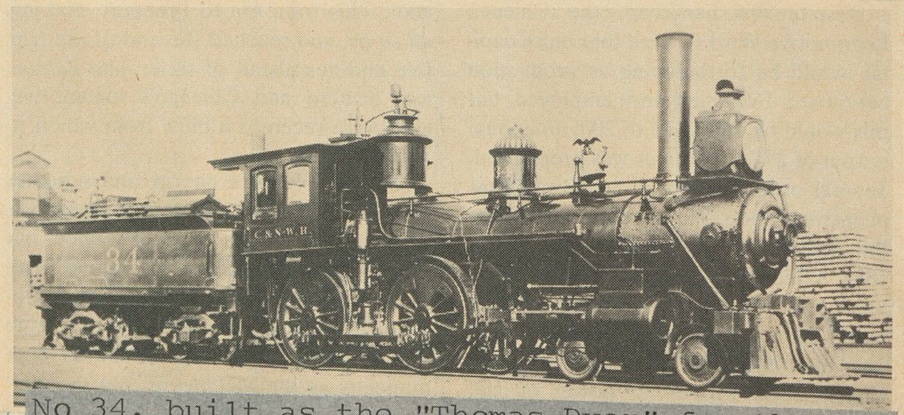




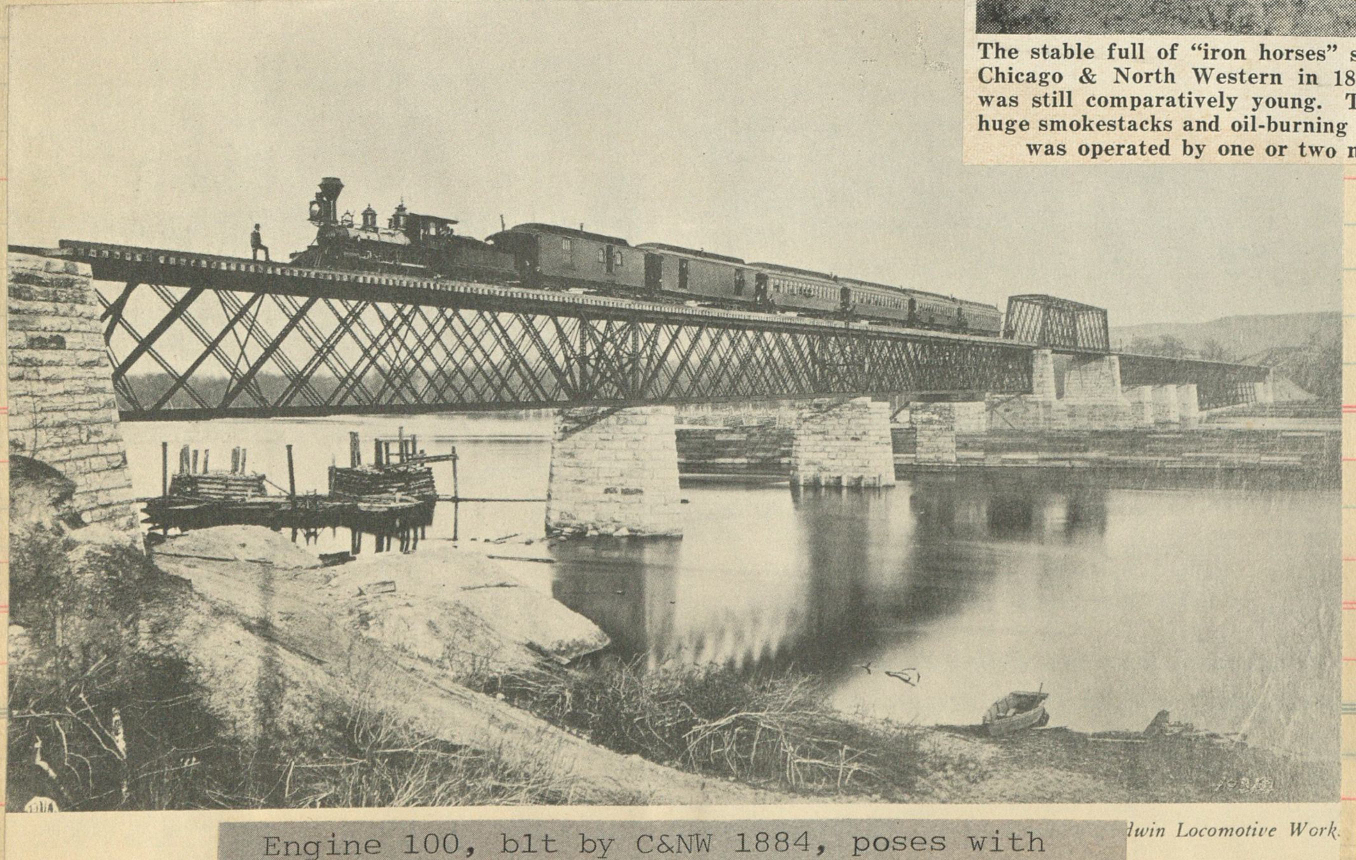
#603 AT MILWAUKEE
c.1895



The stable full of "iron horses" shown above was at Waseca, Minn., on the Chicago & North Western in 1881 when railroading in the United States was still comparatively young. The engines are woodburners, dominated by huge smokestacks and oil-burning headlights. The turntable in the foreground was operated by one or two men pushing on the handle at each end.

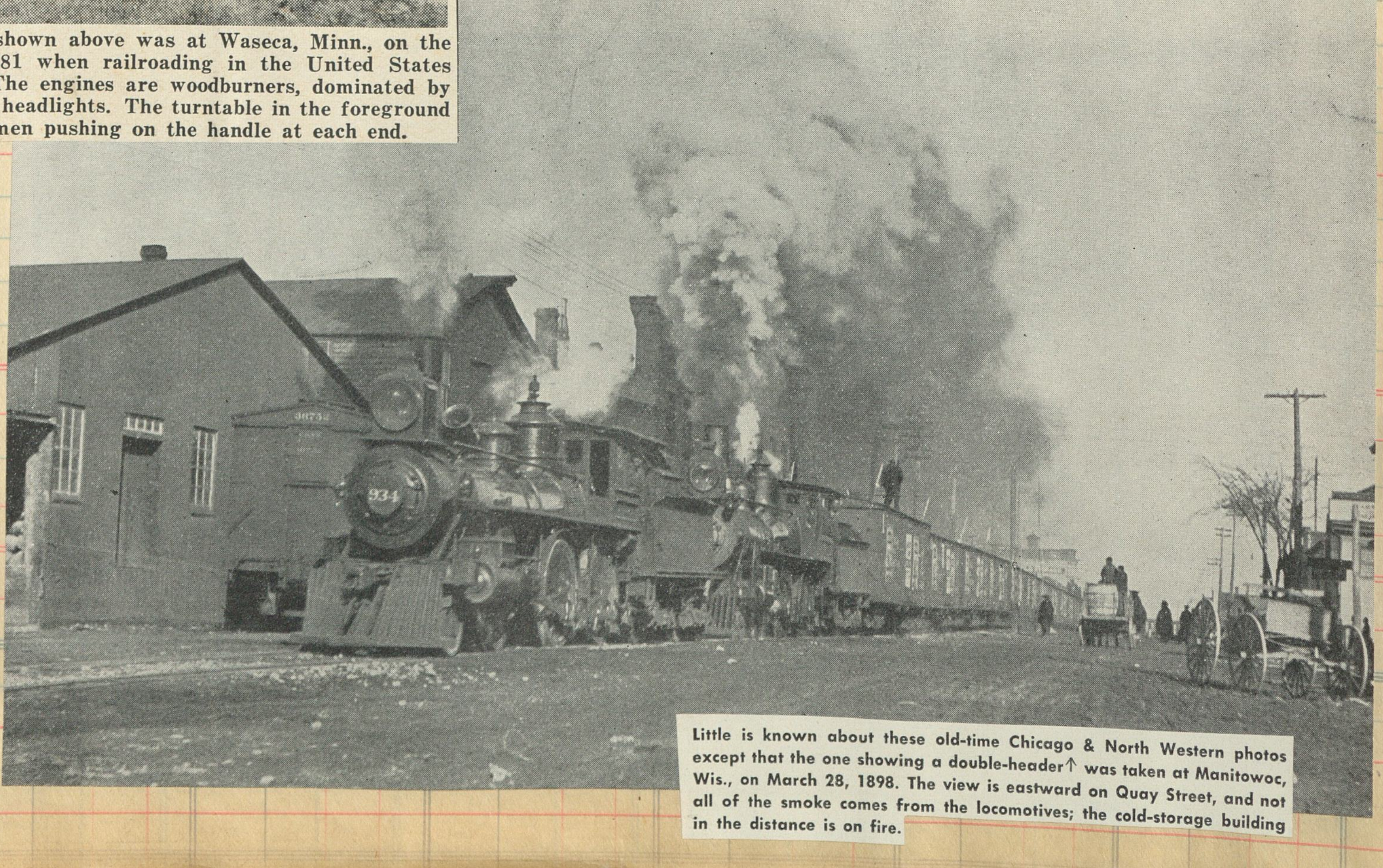


No 34, built as the "Thomas Dyer" for the Galena & Chicago Union by the Chicago Locomotive Works in 1854. Reblt 1861 and again, by the C&NW as Shown, in 1880. Retired 1899.



dwin Locomotive Work.

Engine 100, blt by C&NW 1884, poses with her train on bridge across the Wisconsin River at Merrimac, Wis.



Little is known about these old-time Chicago & North Western photos except that the one showing a double-header↑ was taken at Manitowoc, Wis., on March 28, 1898. The view is eastward on Quay Street, and not all of the smoke comes from the locomotives; the cold-storage building in the distance is on fire.

7

Chicago & North Western Ry. is the only Railroad with

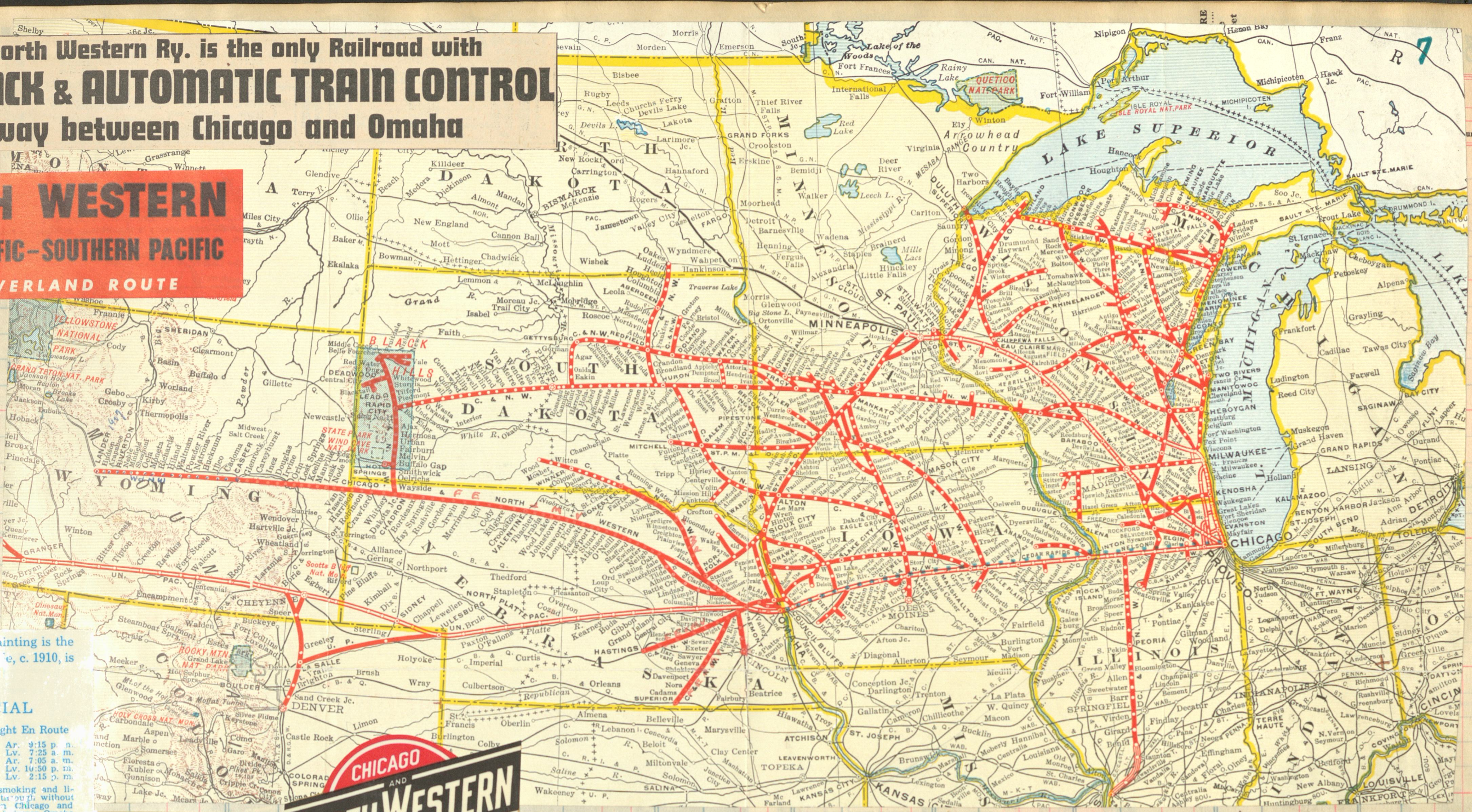
**DOUBLE TRACK & AUTOMATIC TRAIN CONTROL**

all the way between Chicago and Omaha

**NORTH WESTERN**

**UNION PACIFIC—SOUTHERN PACIFIC**

*THE OVERLAND ROUTE*



The train shown in the cover painting is the Colorado Special, whose timetable, c. 1910, is reproduced below.

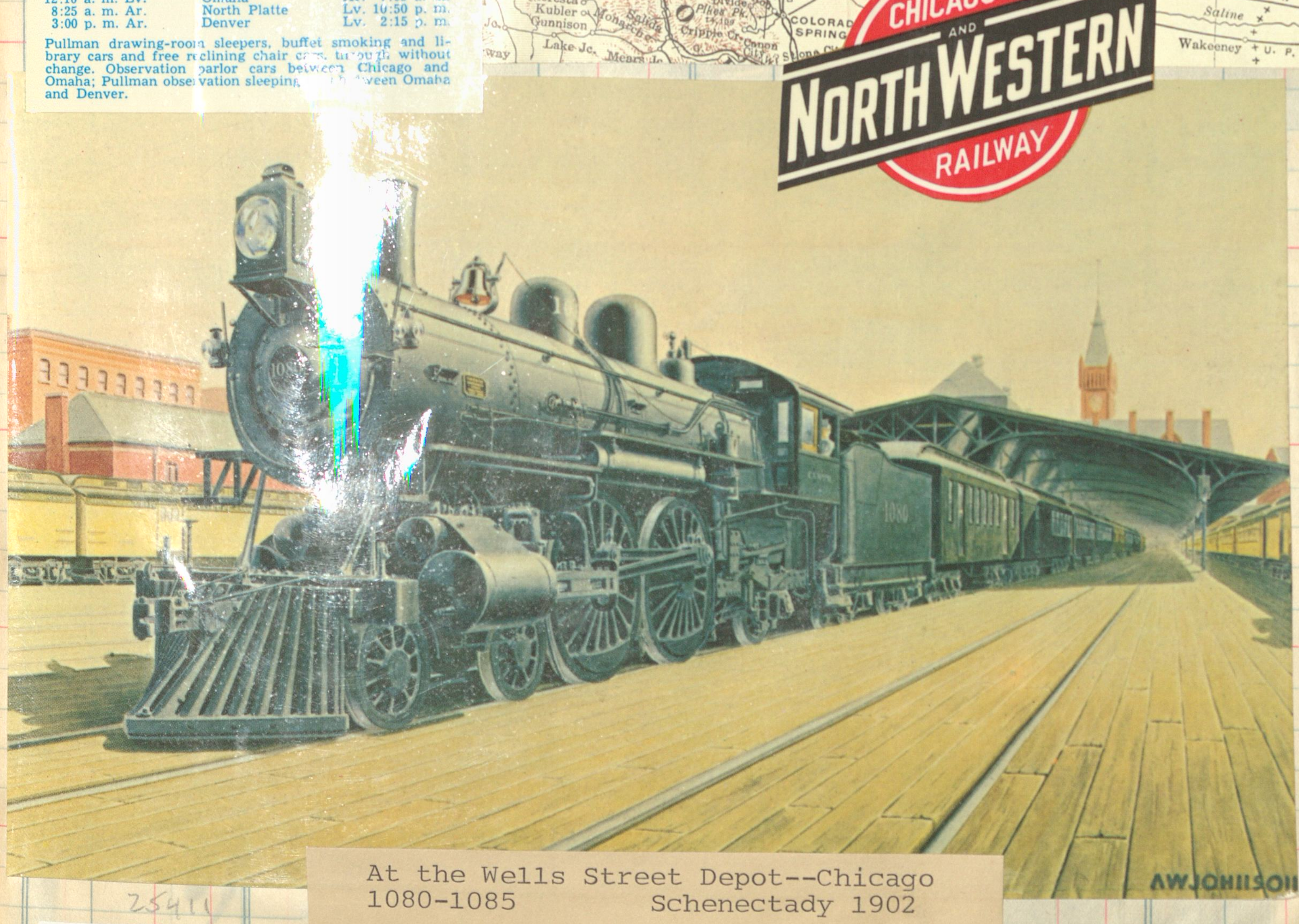
COLORADO SPECIAL

Fast Daily Schedules—Only One Night En Route

| | | | |
|---|---|---|---|
| 10:00 a. m. Lv. | Chicago | Ar. | 9:15 p. m. |
| 11:48 p. m. Ar. | Omaha | Lv. | 7:25 a. m. |
| 12:10 a. m. Lv. | Omaha | Ar. | 7:05 a. m. |
| 8:25 a. m. Ar. | North Platte | Lv. | 10:50 p. m. |
| 3:00 p. m. Ar. | Denver | Lv. | 2:15 p. m. |

Pullman drawing-room sleepers, buffet smoking and library cars and free reclining chair cars, through without change. Observation parlor cars between Chicago and Omaha; Pullman observation sleeping [illegible] between Omaha and Denver.

CHICAGO AND NORTH WESTERN RAILWAY

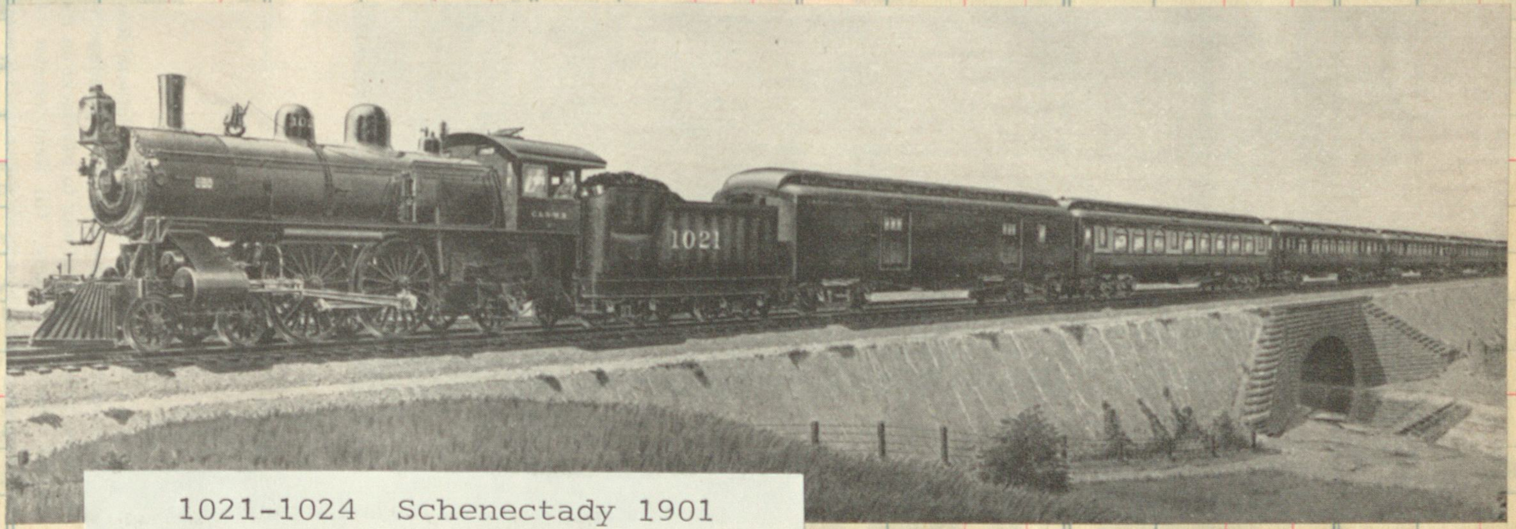


At the Wells Street Depot--Chicago
1080-1085 Schenectady 1902

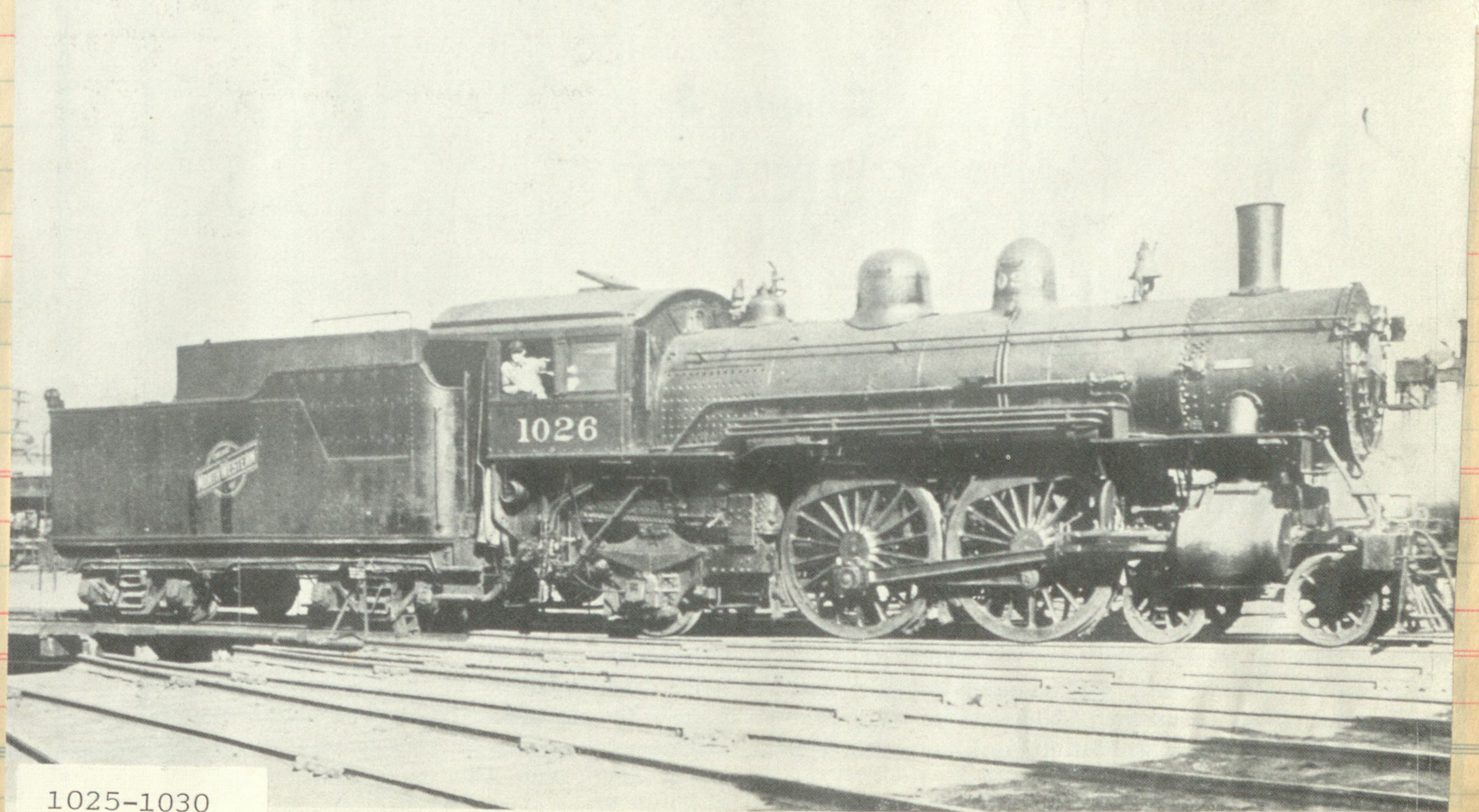
25411

Racine, Wisconsin

Blt 1901



1021-1024 Schenectady 1901

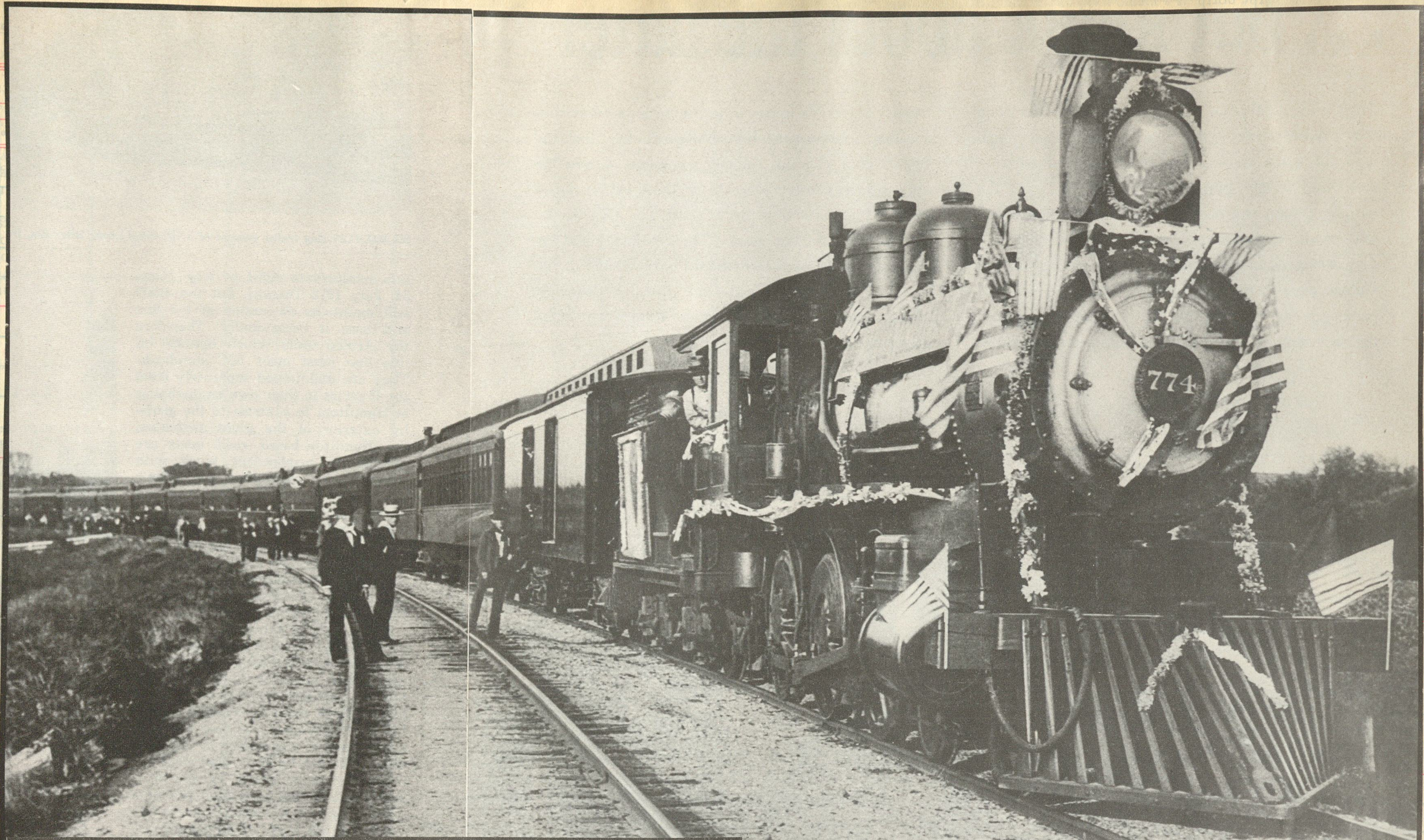


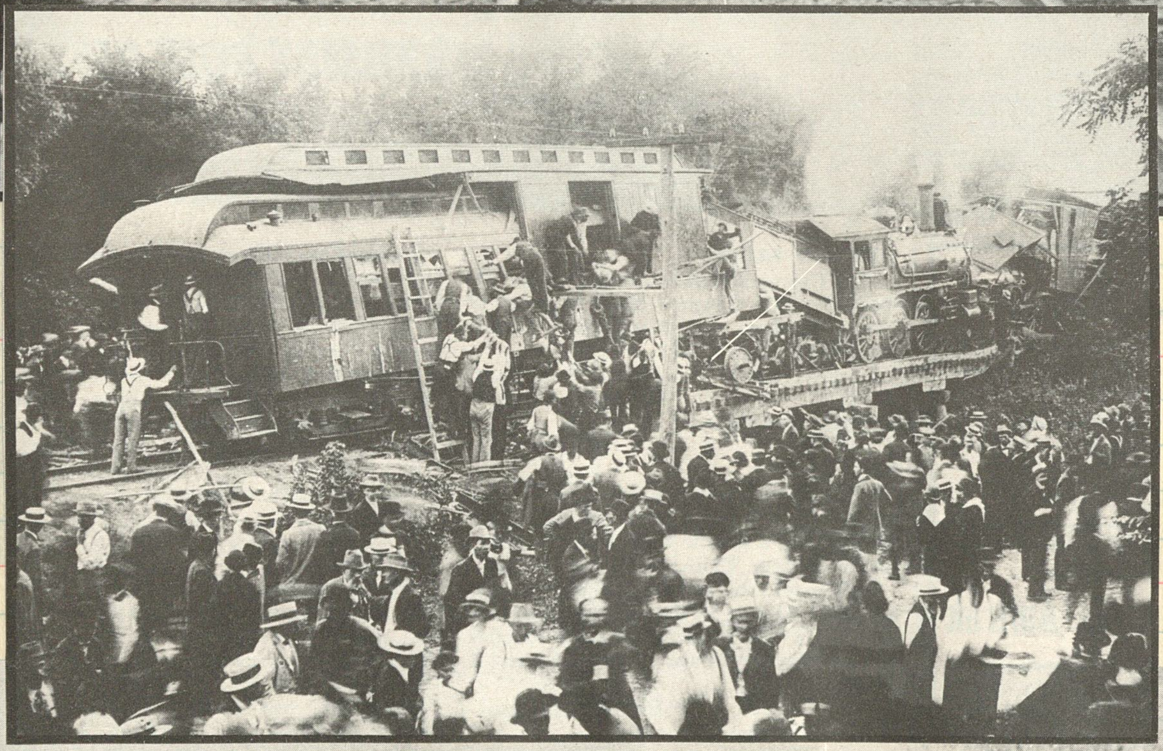
1025-1030
Schen 1901
c/n 6139

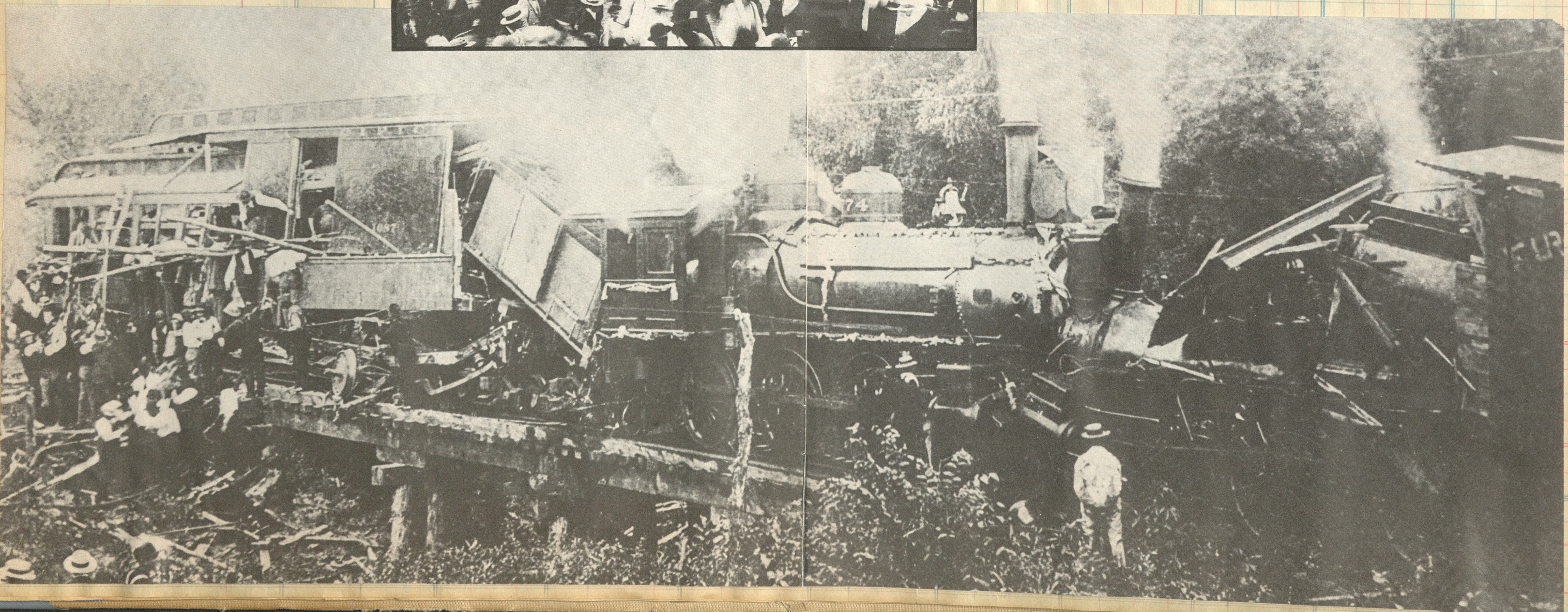
**BESIDES A FLEET** of Ten wheelers, and Pacifics, the C&NW also operated a number of Atlantics in suburban service. This Class "D" is equipped with a Stenphenson valve gear and was one of a few C&NW steamers that were oil burners. (Courtesy Chicago & North Western Ry.)

8

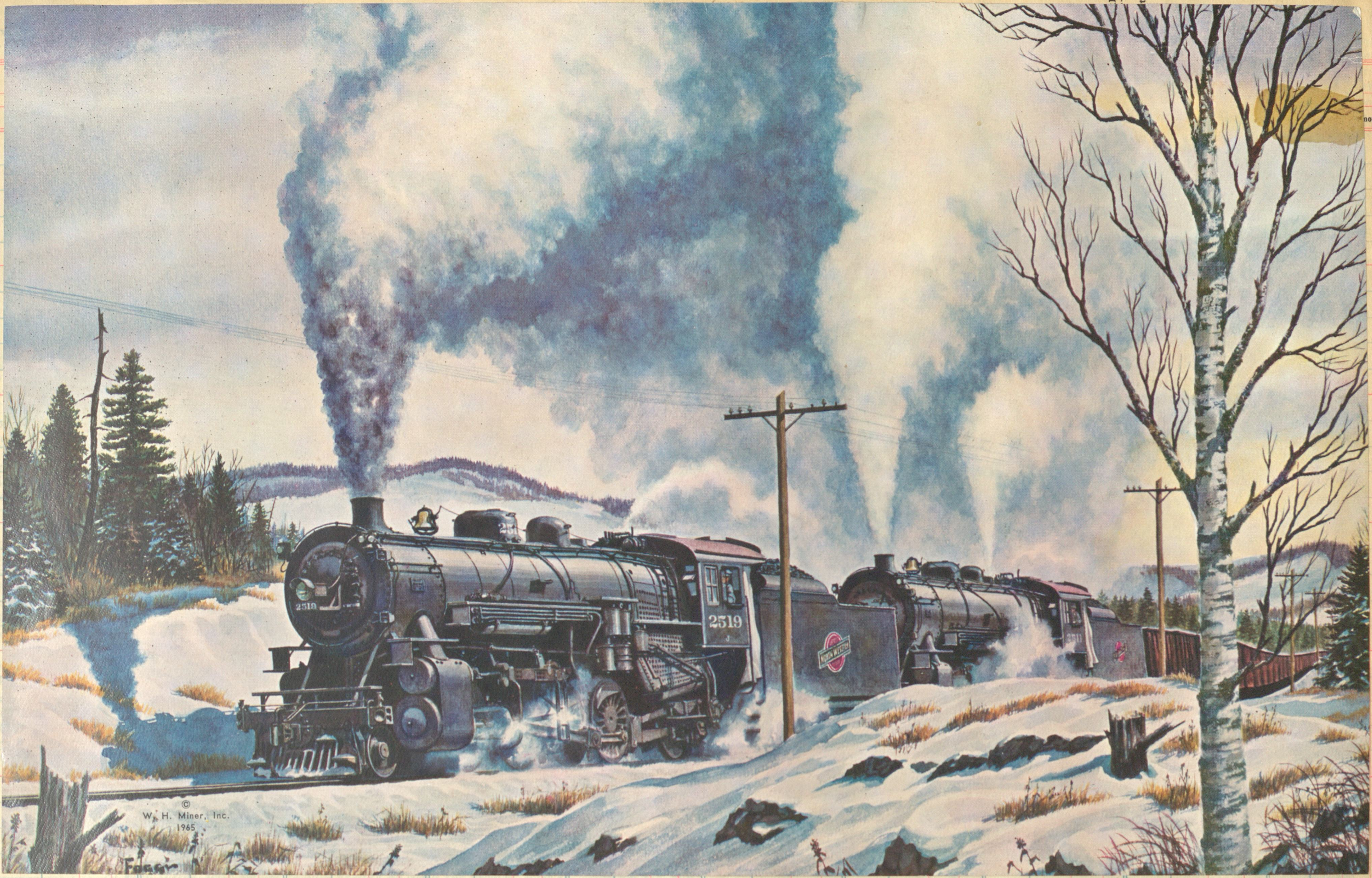
ON Sunday, July 26, 1896, granger railroading still was a train-order and link-and-pin affair (although it did boast air brakes); the Chicago & North-Western Railway employed a hyphen in its name; and the help at the roundhouse was willing to festoon an engine for an excursion. And a photographer always seemed to be present to record an excursion, such as this one at Logan, Ia., where the westbound Union Pacific Pioneers special stood in the siding behind Schenectady-built Ten-Wheeler No. 774. The engineer is alert to the camera, as are those riders who have unloaded in anticipation of the impending train meet. The day appears at least cloudy bright; no fewer than 11 American flags are visible on the 4-6-0; and middle America obviously is in mechanical ascendancy. But what not a man in this photo suspects is that 5 minutes away is an event which will be recorded in the *Railroad Gazette* of August 21, 1896, as a "butting collision." For soon after the heavily loaded 16-car excursion train moved onto the main track, it collided head on with an eastbound freight powered by 4-4-0 No. 1. In the ensuing pileup the baggage car and the first coach telescoped; 25 passengers and 1 employee died, and 41 passengers and 2 employees suffered injuries. All victims were in the two vehicles. The era of all-steel passenger-car construction was not to dawn until the next century, and the vulnerability of wood under impact is terribly apparent in these views taken during the frantic rescue effort that concluded what had begun as a pleasant summer excursion. Credit the collection of Clinton Jones Jr. for these extraordinary 19th century photographs. Credit the *Gazette* for this summary of the cause: "The conductor and engineman of the excursion should have waited at Logan for two regular eastbound trains, a passenger and a freight. They waited for the former, but forgot about the latter."—D.P.M.







Clos. No. Sold Amount Clos. No. Sold Amount



"Gogebic Range Ore Train-1940"
Painting by Howard Fogg Commissioned by the W. H. Miner Co., Chicago OKM

C&NW Extra 2519, headed by a Mike, lumbers out of Cragin, Ill. Warren Brandt

| | |
|---|---|
| Cylinders | 27" x 32" |
| Drivers, diam. | 61" |
| Steam pressure | 185 lb. |
| Grate area | 63 sq. ft. |
| Water heating surface | 4153 sq. ft. |
| Superheating surface | 914 sq. ft. |
| Weight on drivers | 232,000 lb. |
| " total engine | 312,000 lb. |
| Tractive force | 60,100 lb. |

2533-2552
Brooks 1922
c/n 63520

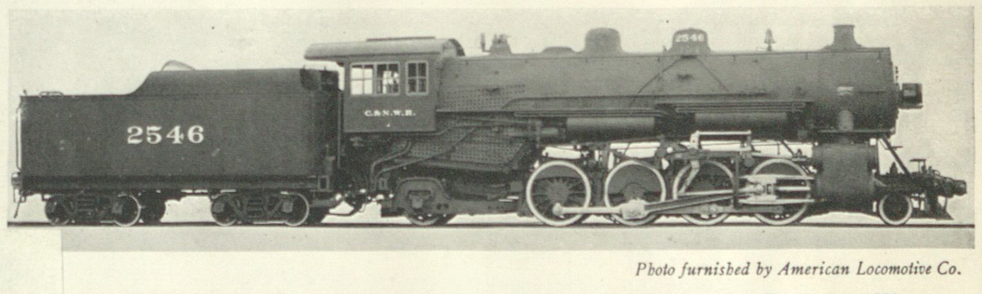
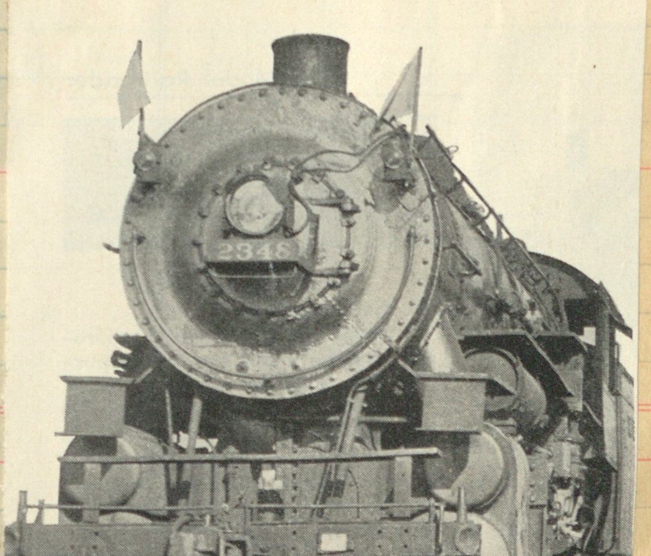


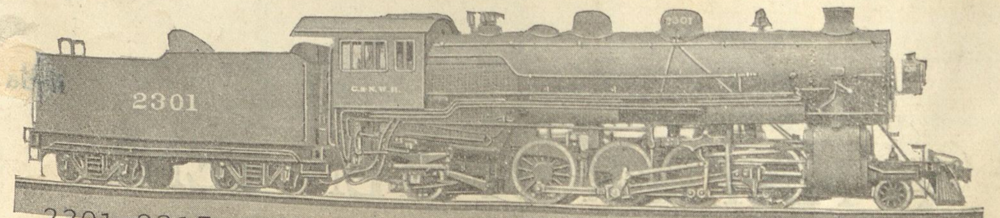
*Photo furnished by American Locomotive Co.*

**Mikado Type Locomotive, Class J, Built by the American Locomotive Company, 1922**

A Mike climbs the hill east of Geneva, Ill with westbound extra Lucius Beebe



Class J

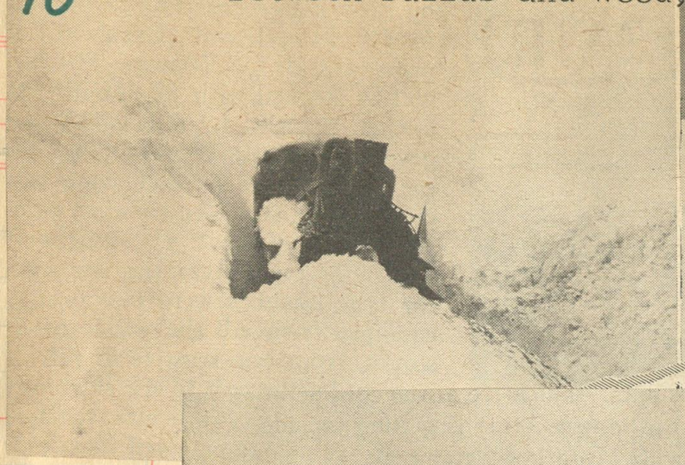


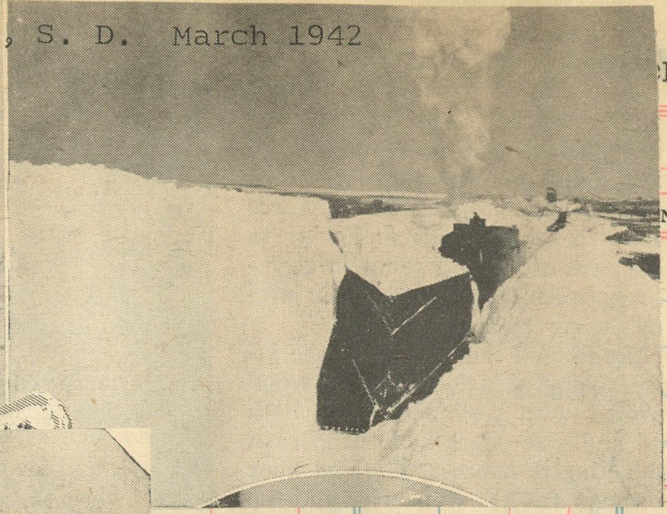
2301-2315 class J c/n 53094 Schen 1913 OKM

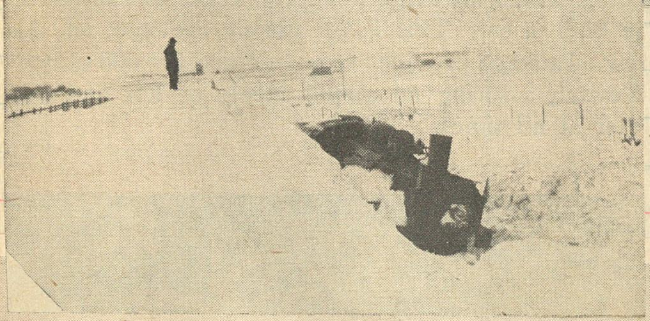
MIKADO TYPE LOCOMOTIVE—CHICAGO & NORTHWESTER RAILWAY

Total weight of engine, 302,000 pounds; Weight on drivers, 227,500 pounds; Diameter of drivers, 61 inches; Boiler pressure, 170 pounds; Cylinders, 27 x 32 inches; Maximum tractive power, 55,300 pounds.

Between Dallas and Wood, S. D. March 1942

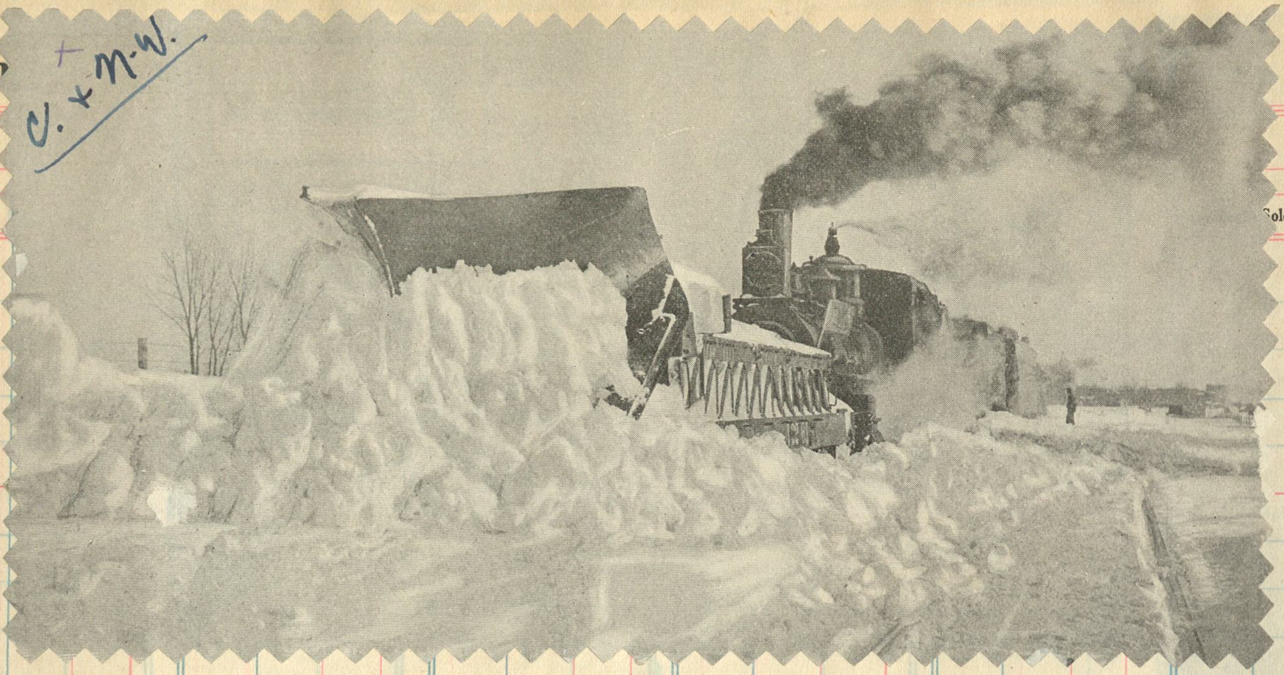


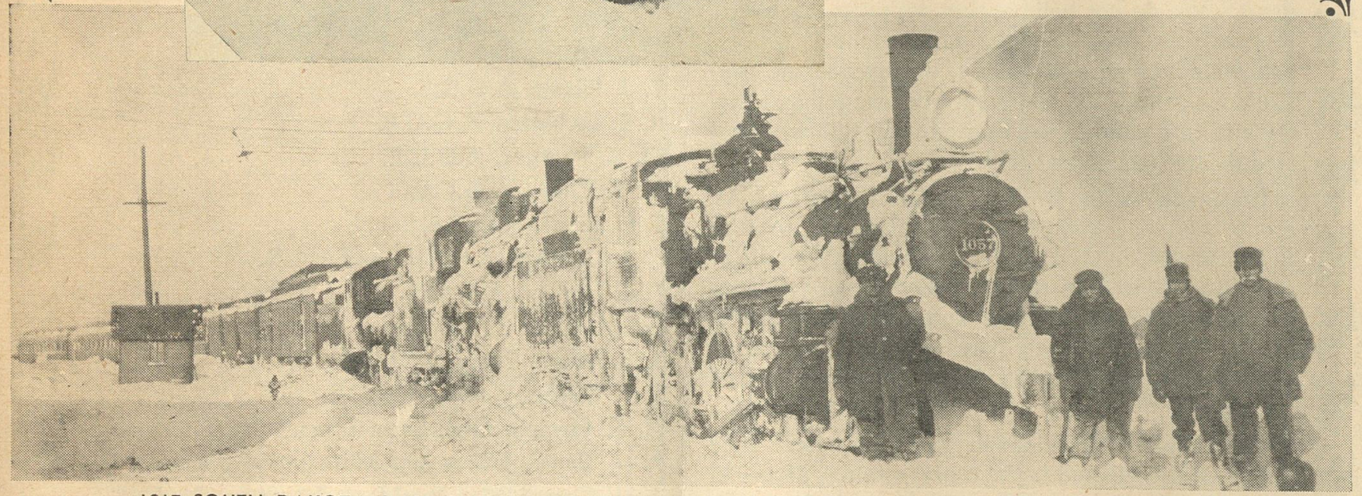




Six foot of snow,
an thirty below,
and, Oh my God,
how the wind does blow!

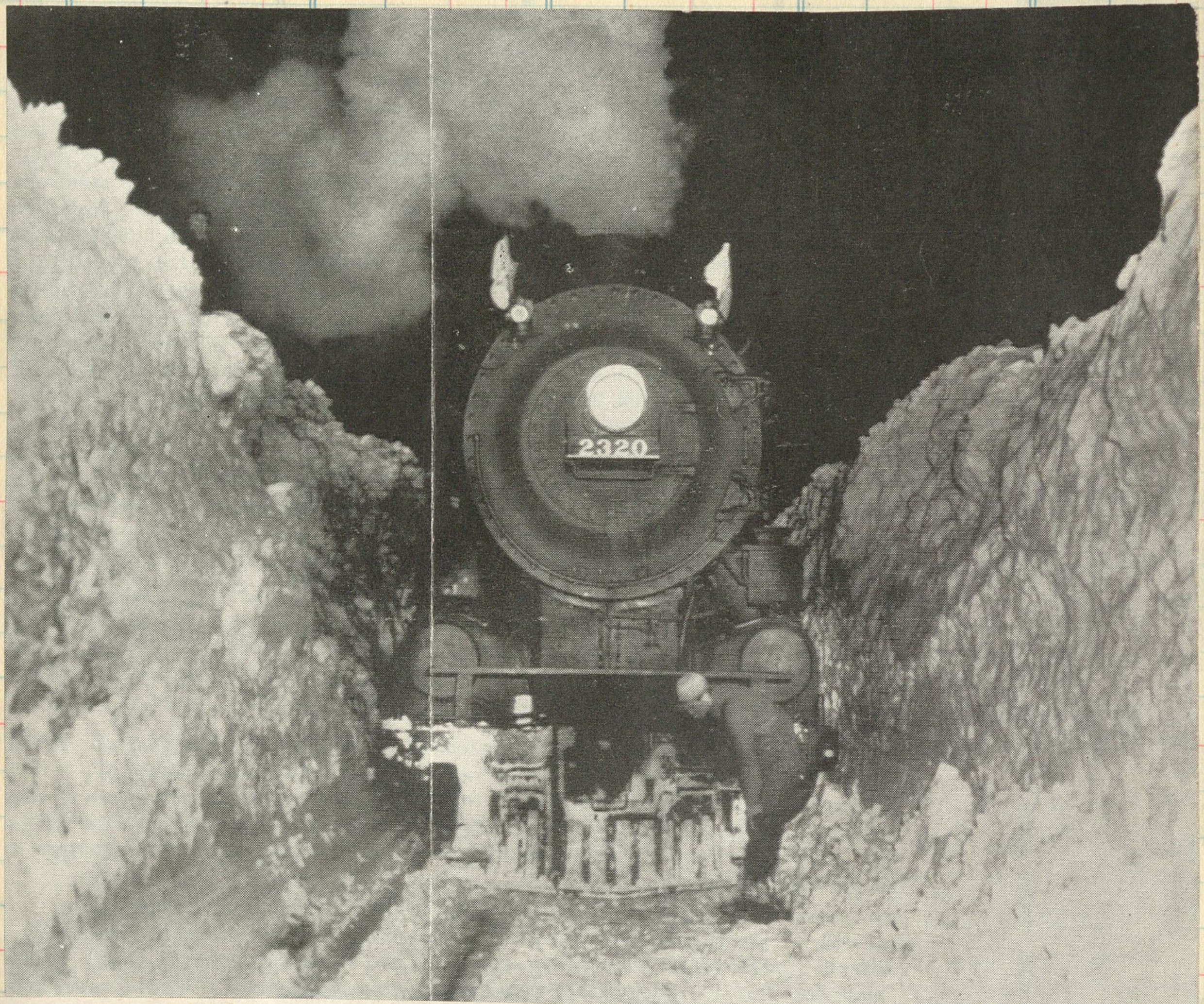
C. & N.W.



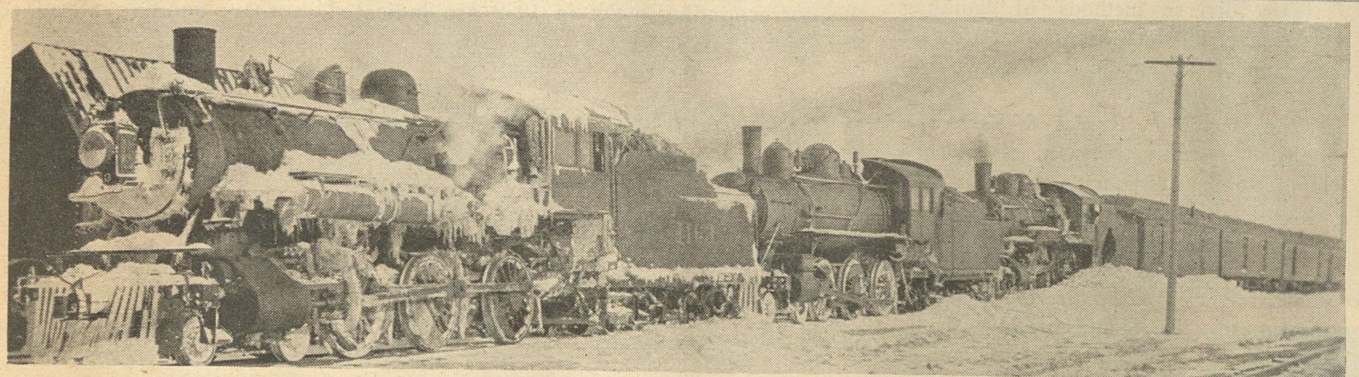


1917 SOUTH DAKOTA SNOWS DELAYED THIS CHICAGO & NORTHWESTERN TRIPLE-HEADER 22 HOURS

Engines 1057, 1018 and 316 were snow-bound 22 hours in 1917 at Tracy, Minn., because of heavy snow fall and 38 degrees below zero weather. Photograph sent in by Brother S. C. Oviatt, S-T. Div. 213, was taken at Tracy, Minn., January 22, 1917. By coincidence Brother *O. K. Snow,* Div. 213, now retired, was piloting the lead engine and Brother R. C. Graff, Div. 213, operating one of the others.

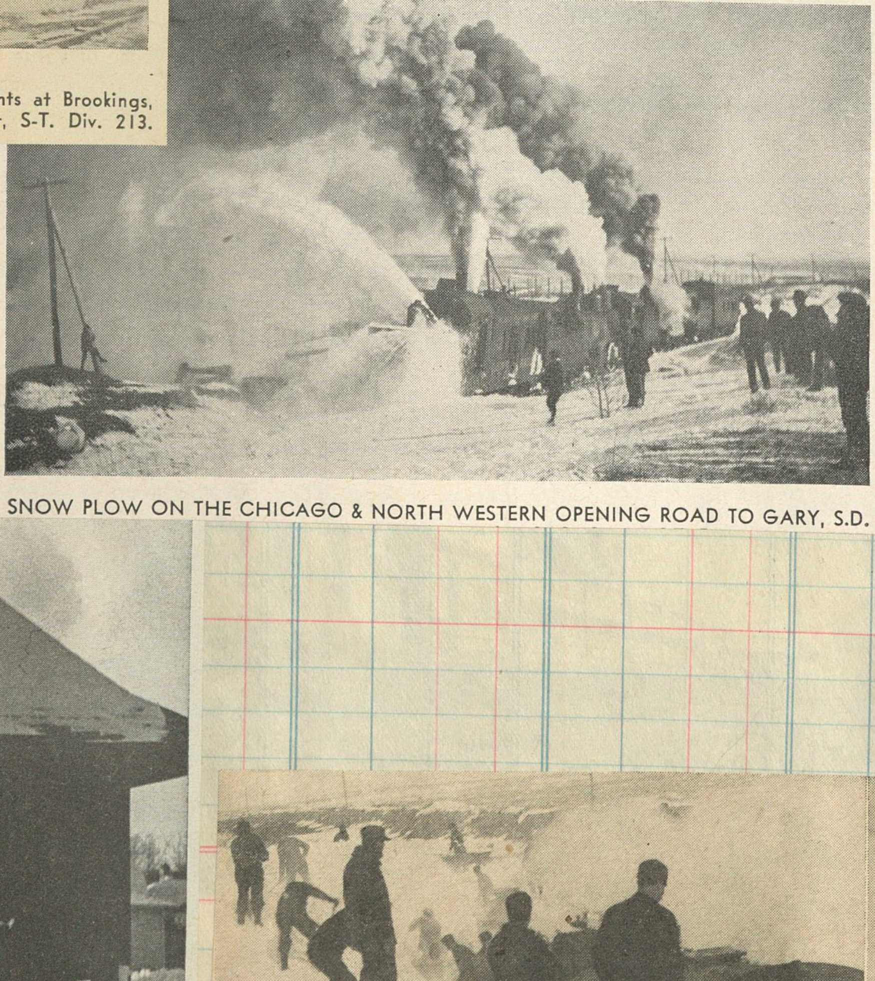


West of Chadron, Neb.
Winter of 1948-49

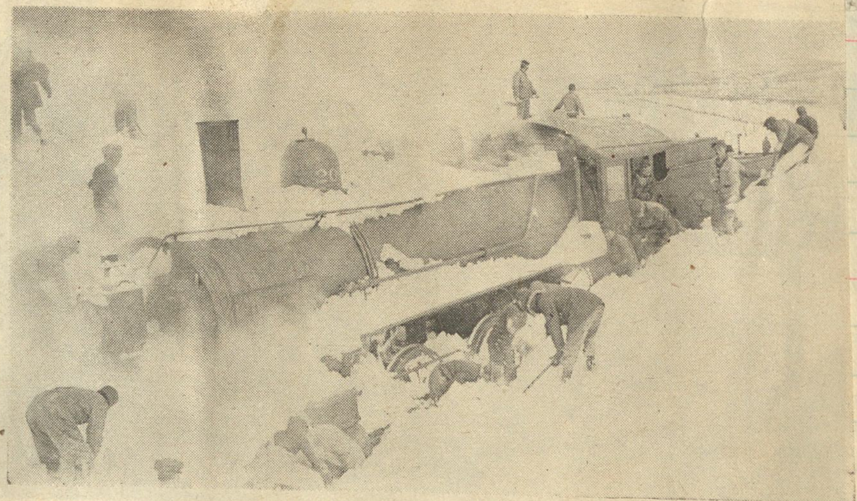


CHICAGO & NORTHWESTERN TRIPLE-HEADER AFTER 1917 SNOW STORM

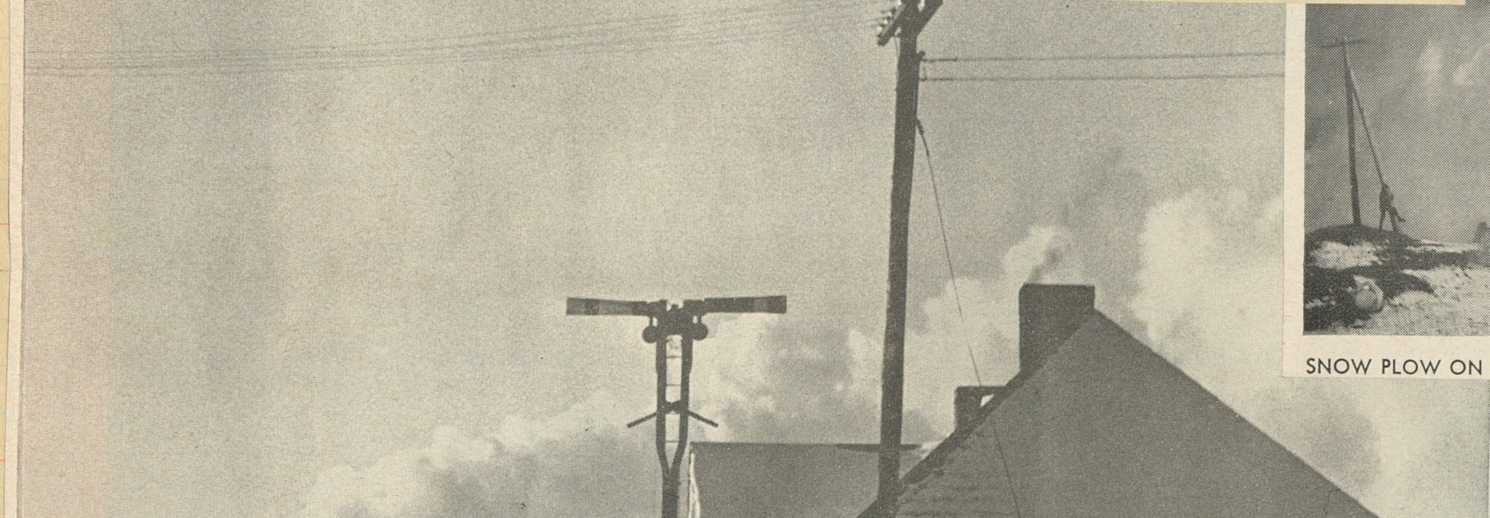
This photograph was taken at Lake Preston, January 31, 1917, after these engines had been snow-bound two days and nights at Brookings, S. D. Brother R. C. Graff, Div. 213, was operating one of the engines. Photograph was sent in by Brother S. C. Oviatt, S-T. Div. 213.



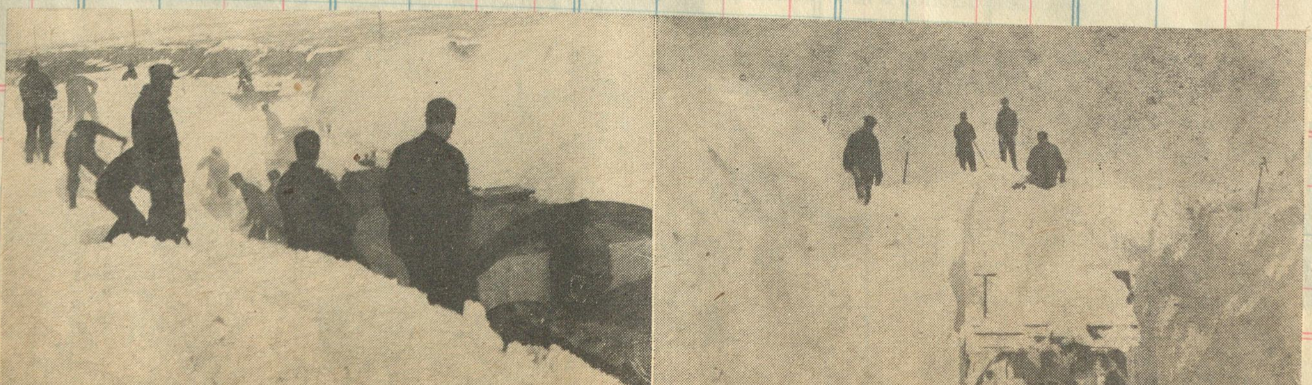
SNOW PLOW ON THE CHICAGO & NORTH WESTERN OPENING ROAD TO GARY, S.D.



BATTLING SNOW ON THE CHICAGO & NORTH WESTERN IN SOUTH DAKOTA IN 1913
This picture was taken near Philip, S.D., and is the property of Bro. J. H. Hulse, Div. 213.
The photo was submitted to the Journal by Bro. S. C. Oviatt, S.-T., Div. 213.



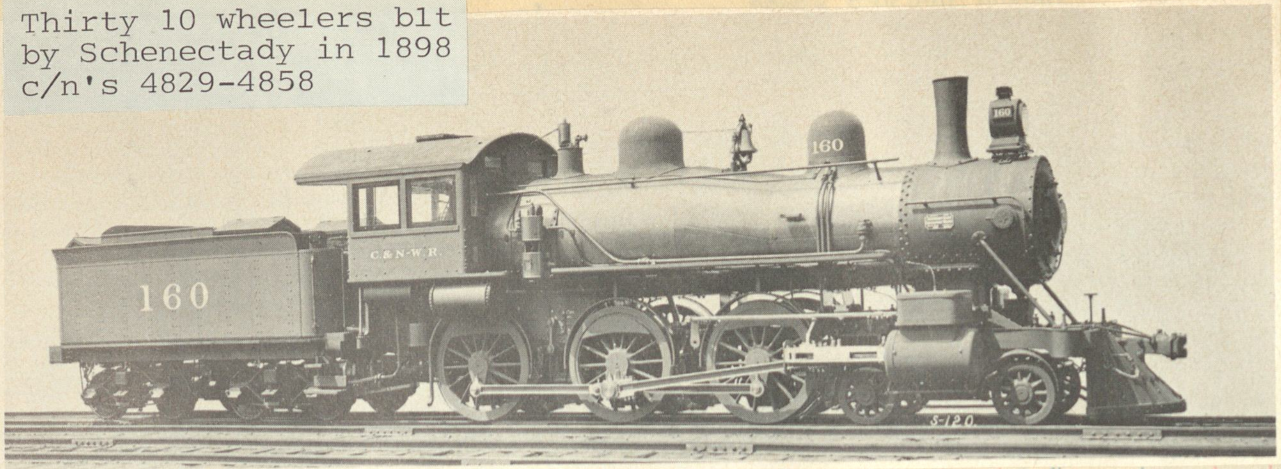
Snow extra at Kiester, Minn on line between Mason City, Iowa and Blue Earth, Minn.

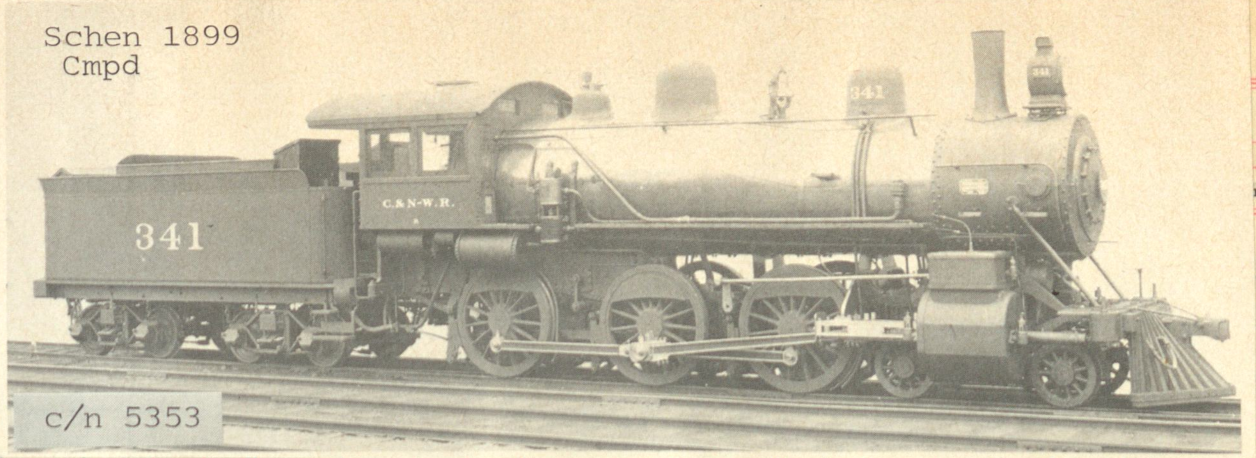


AFTER A 1917 BLIZZARD ON THE CHICAGO & NORTH WESTERN AT ONIDA, S.D.

Thirty-eight feet of snow greeted this crew, February 10, 1917. The place was Okobojie Cut near Onida, S.D. The two above photos show how a clear track begins to emerge following hours and hours of shovelling.

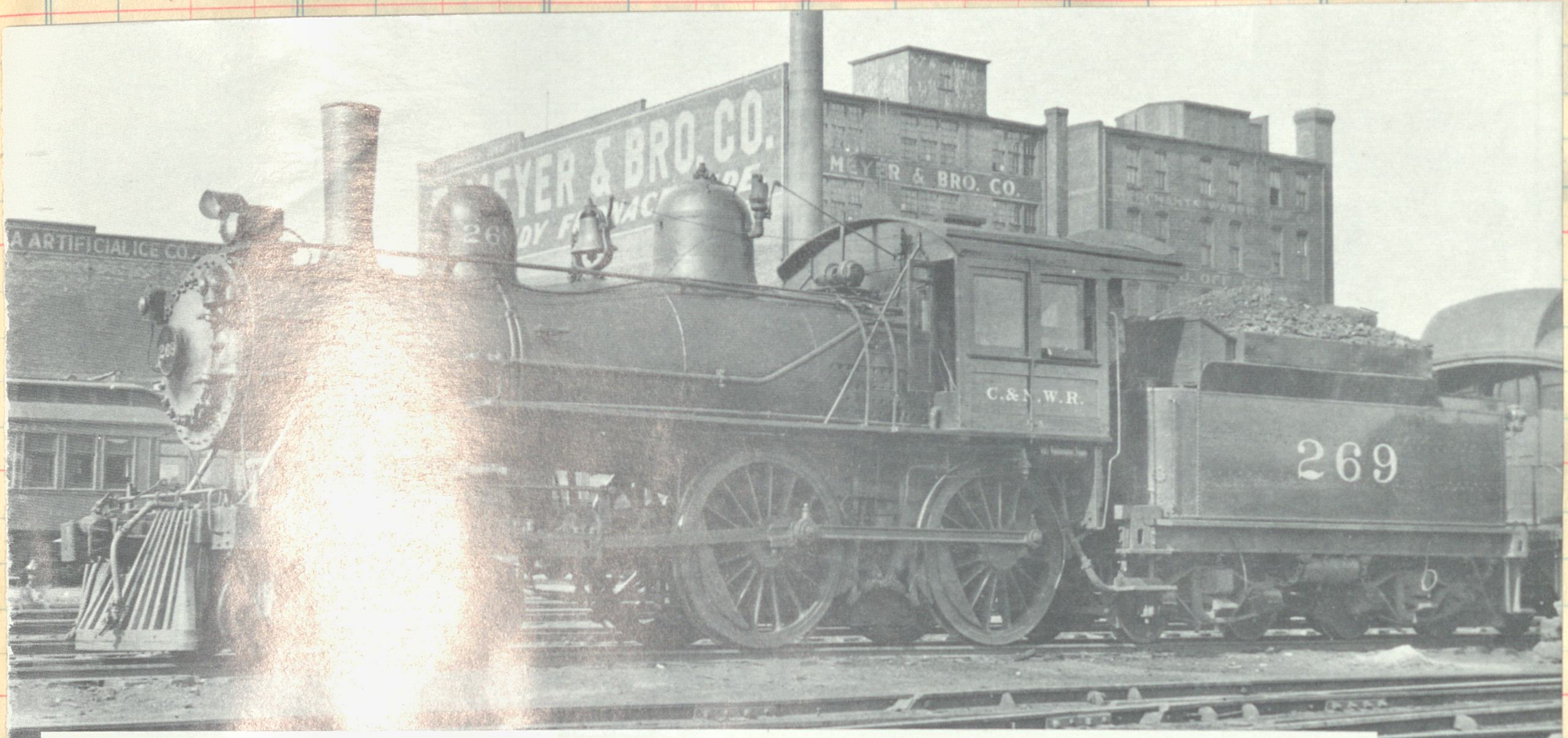
Clos. No. Sold Amount


Thirty 10 wheelers blt
by Schenectady in 1898
c/n's 4829-4858

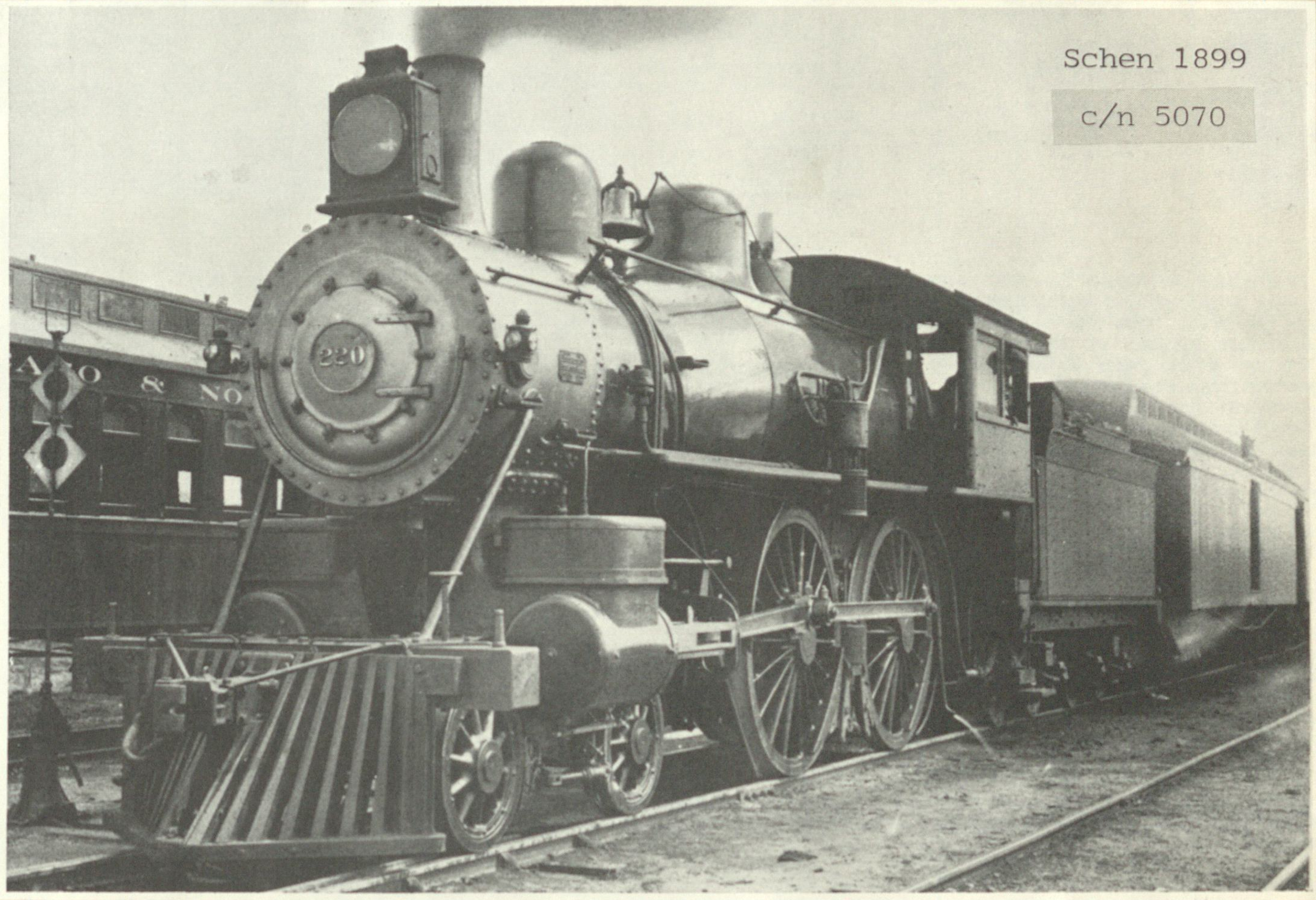

Schen 1899
Cmpd

c/n 5353

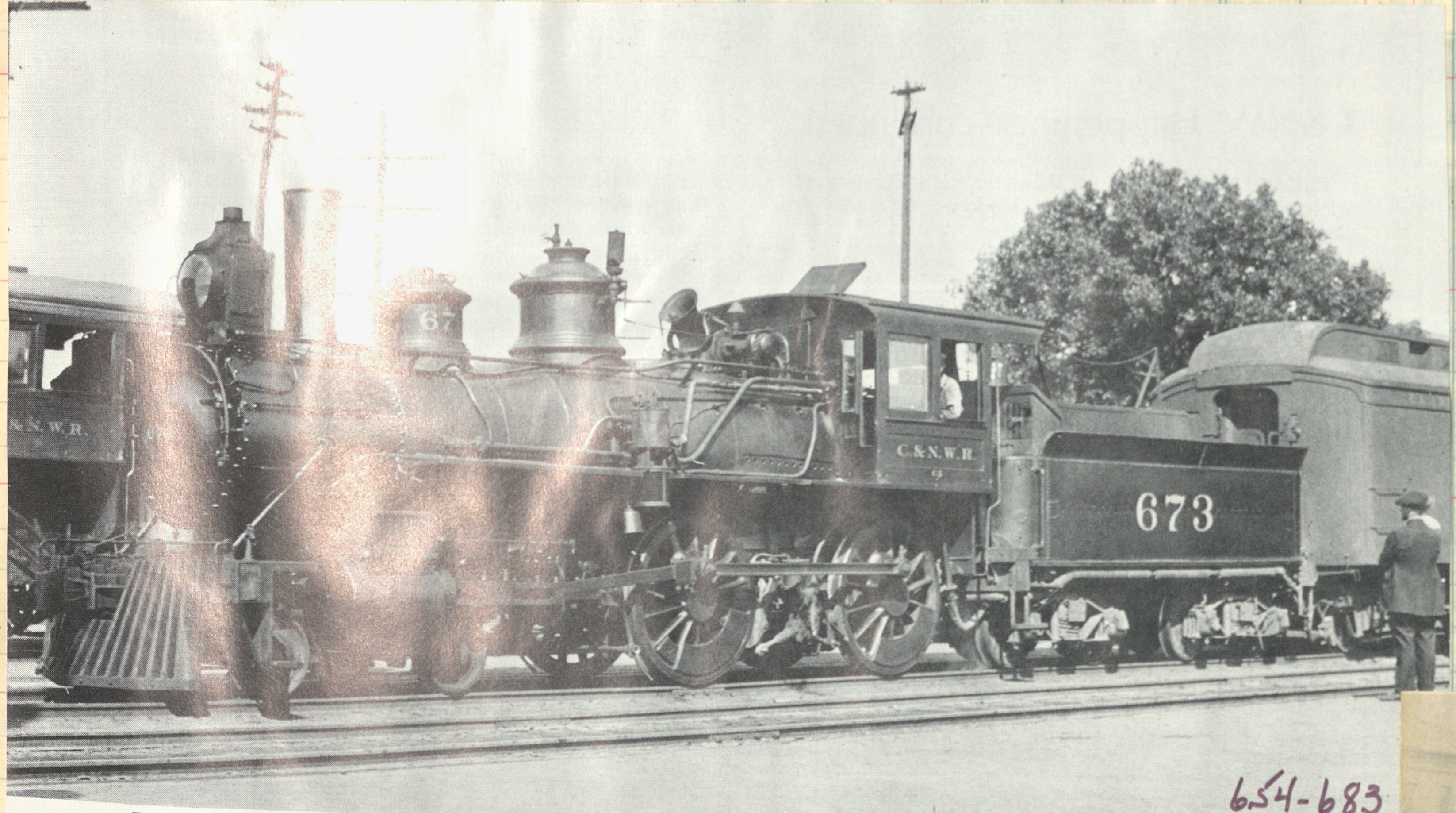
Clos. No. Sold Amount



Engine 269, a class A-5, American Standard type, at the south end of the Peoria Union Depot during the early twenties. Engine 269 was built in 1882 by the C&NW as a class A-1, rebuilt in 1899 as a class A-5, and scrapped in 1928. Photo by O. H. Means, from the collection of Robert A. Janz.

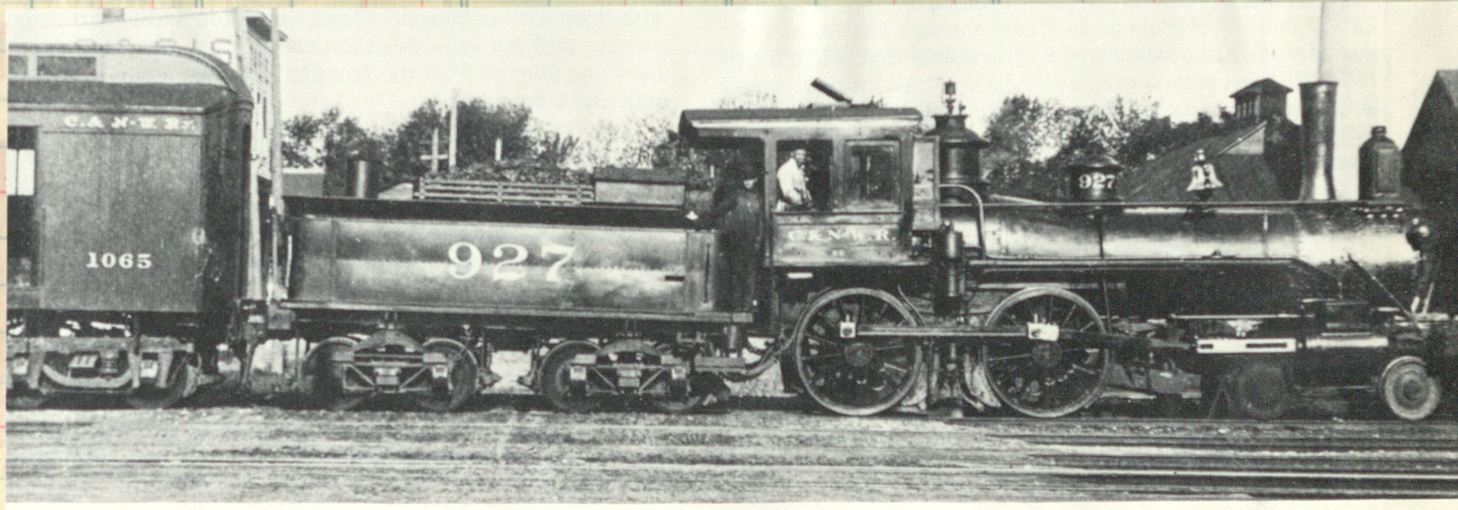

Schen 1899

c/n 5070

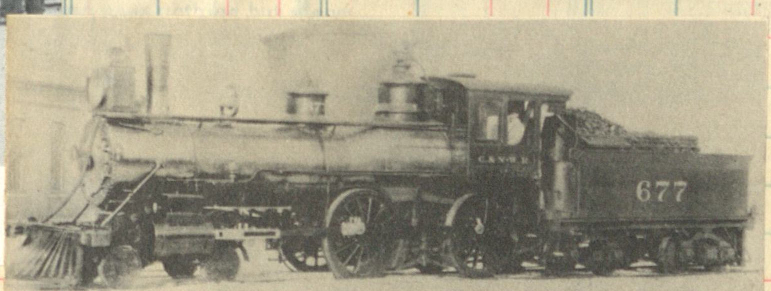


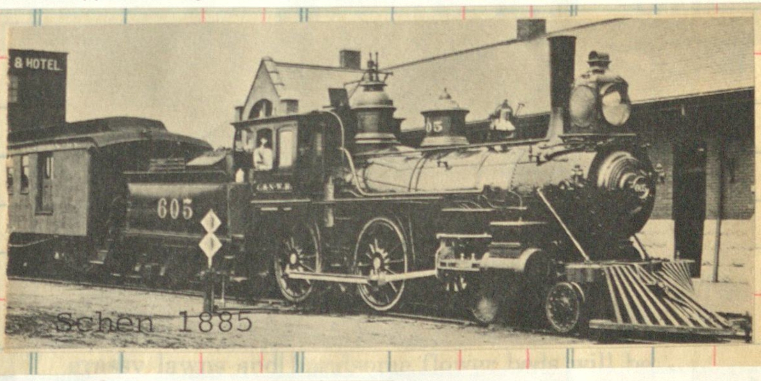
654-683

Engine 673 at Fremont, Nebraska on May 31, 1922 departing with the Lincoln train. In the background is engine 1313, train number 5's power. Note the wooden baggage car on the Lincoln train, part of a predominantly all wood consist. Engine 673, a class C-5, American type, was originally built as a class C-3 by Schenectady in 1887. She was rebuilt by the C&NW in April of 1921 as a class C-5 engine and was eventually scrapped on February 13, 1929. Photo by J. Foster Adams, from the collection of the Wisconsin State Historical Society.



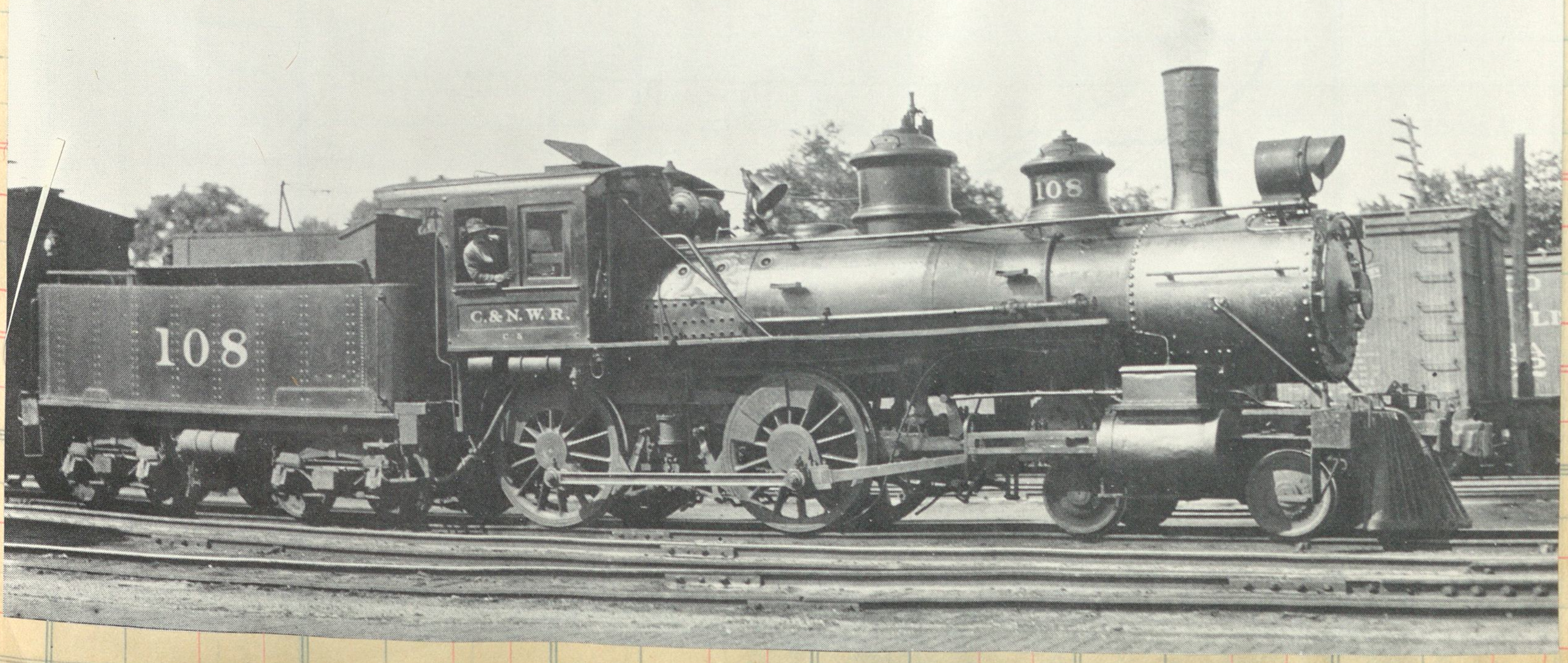
Engine 927 and the Clintonville passenger train, otherwise known as the crossline passenger, is shown here standing at Chicago Street in Oconto around 1905. In the cab is engineer Ed Mayberry, a good friend of Oakman Mullen. Engine 927 was built in 1880 by the Rhode Island Locomotive Works for the MLS&W. At the time of construction she was numbered 22, after delivery she became number 27. When the C&NW took over the road she was renumbered 927 and re-classified from E-3 to J-3. She was scrapped on July 24, 1908. From the collection of Ed Selinsky.



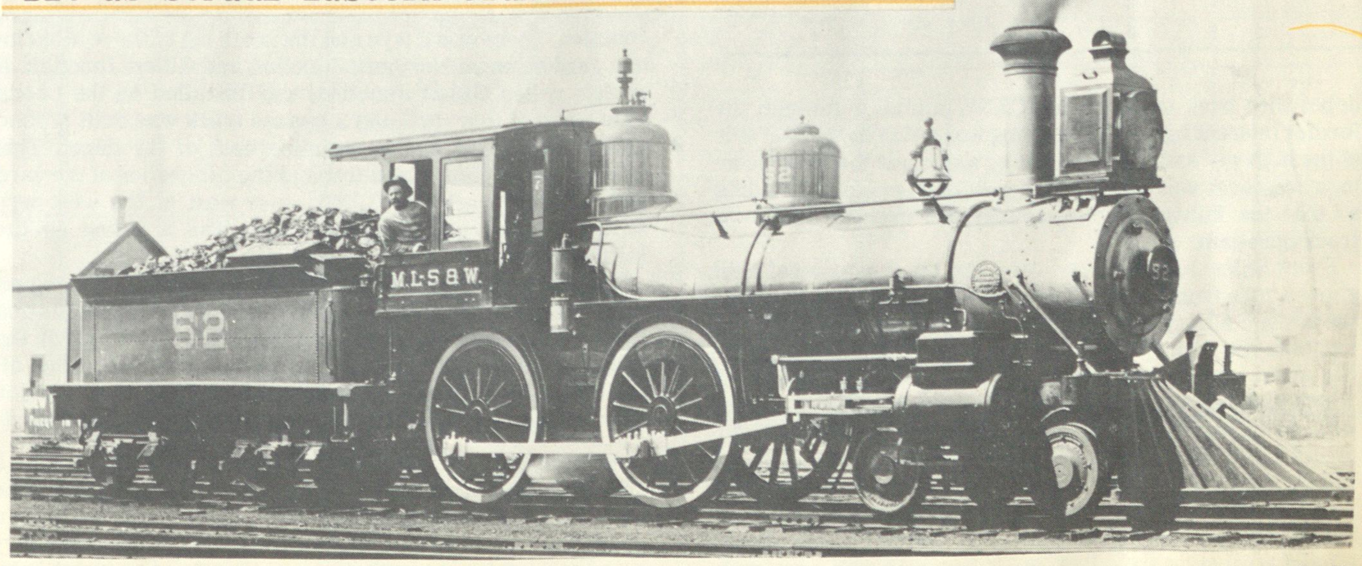


Schen 1885

Schen 1886

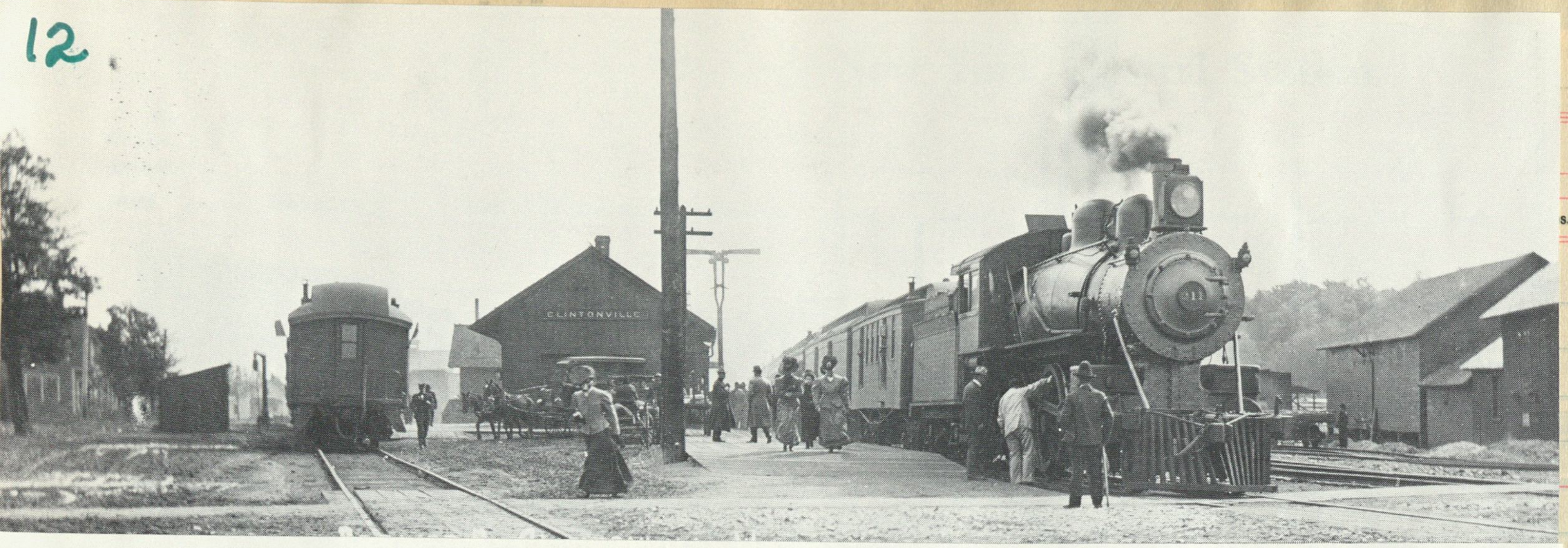


Blt as StPaul Eastern Grand Trunk #2 c/n 7101



MLS&W engine 52 was originally built by the Baldwin Locomotive Works in 1884 for the StPEGT. It was the only locomotive bought new for the little road and was the only StPEGT engine absorbed into the MLS&W roster. Under the C&NW she became number 952 and was reclassified from L to Y. She was scrapped in August of 1909. C&NW photo.

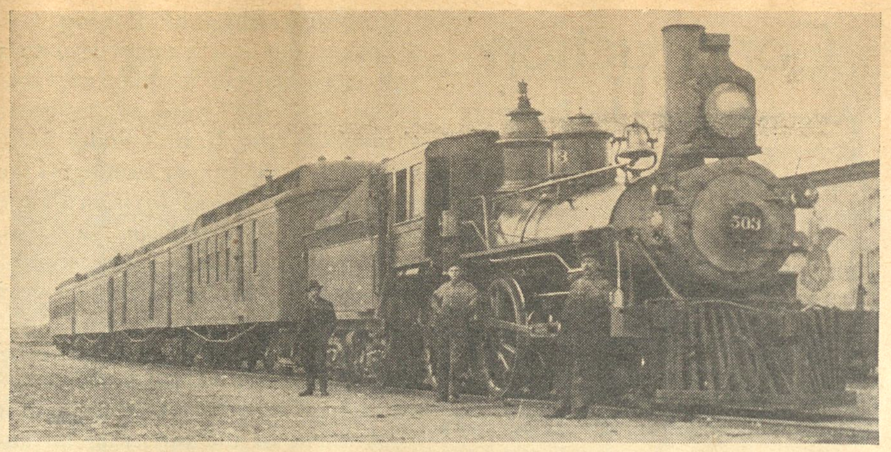
12.



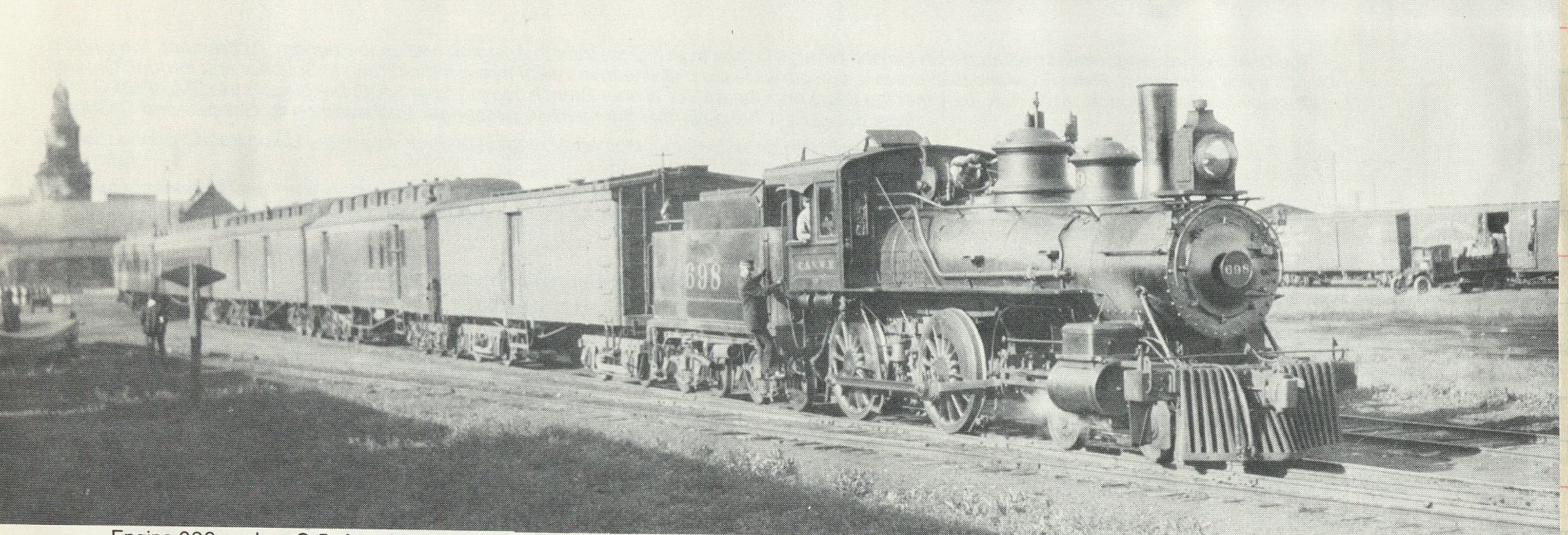
It is late afternoon and engine 211 has just arrived at Clintonville from Appleton enroute to Eland. The last crossline passenger train of the day is waiting to the left of the depot. After passenger connections, baggage and mail transfers are made both trains will depart for their respective destinations. Engine 211, a class B American type, was built by the Schenectady Locomotive Works in 1899 and was scrapped on March 8, 1930. This charming example of early day railroading is from the collection of Russ Porter.

s. No. Sold

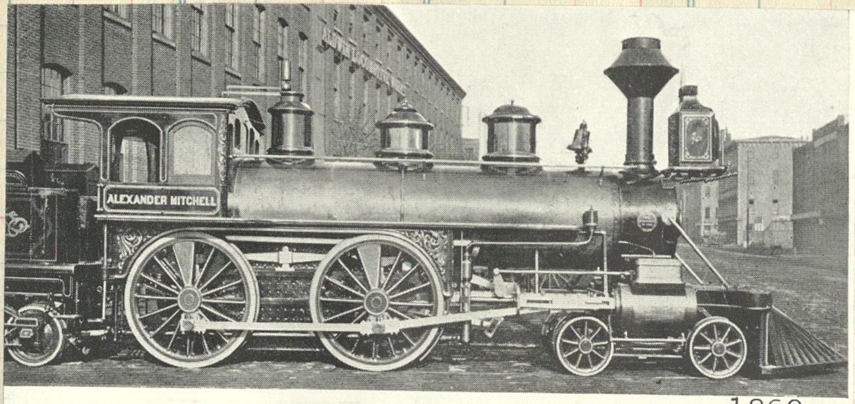
No. Sold Amount Clos. No. Sold Amount



READY TO LEAVE PIERRE, S.D., IN 1907

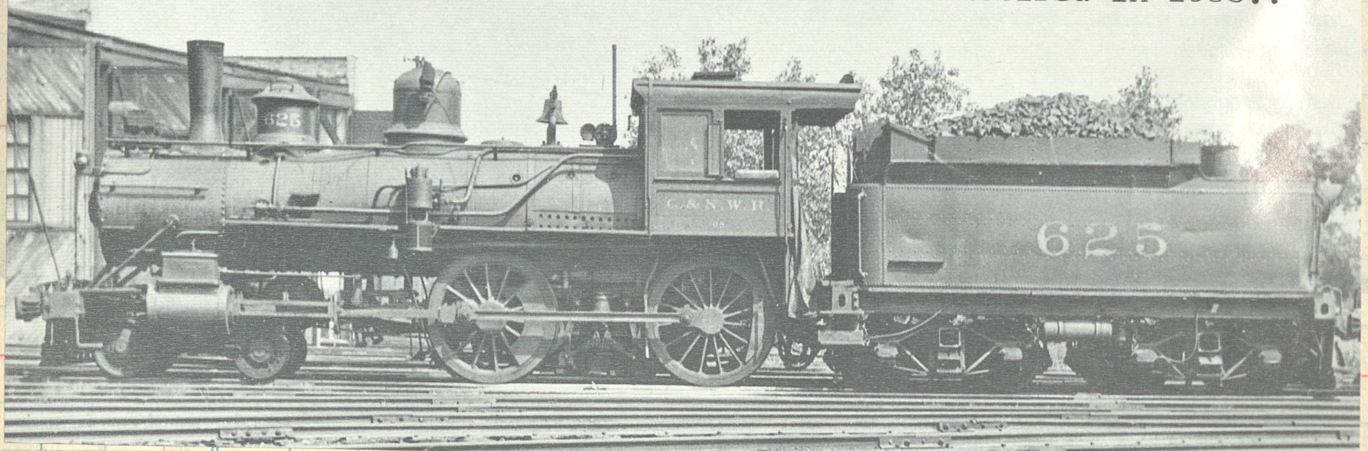


Engine 698, a class C-5, American type, at Lincoln, Nebraska on May 31, 1922. The C&NW track from Fremont, Nebraska to Lincoln was the main artery from points north to the state capitol in 1922. Until 1929, this line, although only a branch, had sufficient business to support two passenger trains a day in each direction. The Lincoln trains were made up of wooden equipment while, by this time, mainline trains were operating with steel consists. The operation of all wood consists allowed the use of smaller motive power such as the class C-5 engines. This type of engine would be taxed beyond its limitations if requried to handle a similar train of steel equipment. Engine 698 was built by the Schenectady Locomotive Works in 1888, rebuilt in 1921 by the C&NW and scrapped on February 15, 1929. Photo by J. Foster Adams from the Wisconsin State Historical Society.

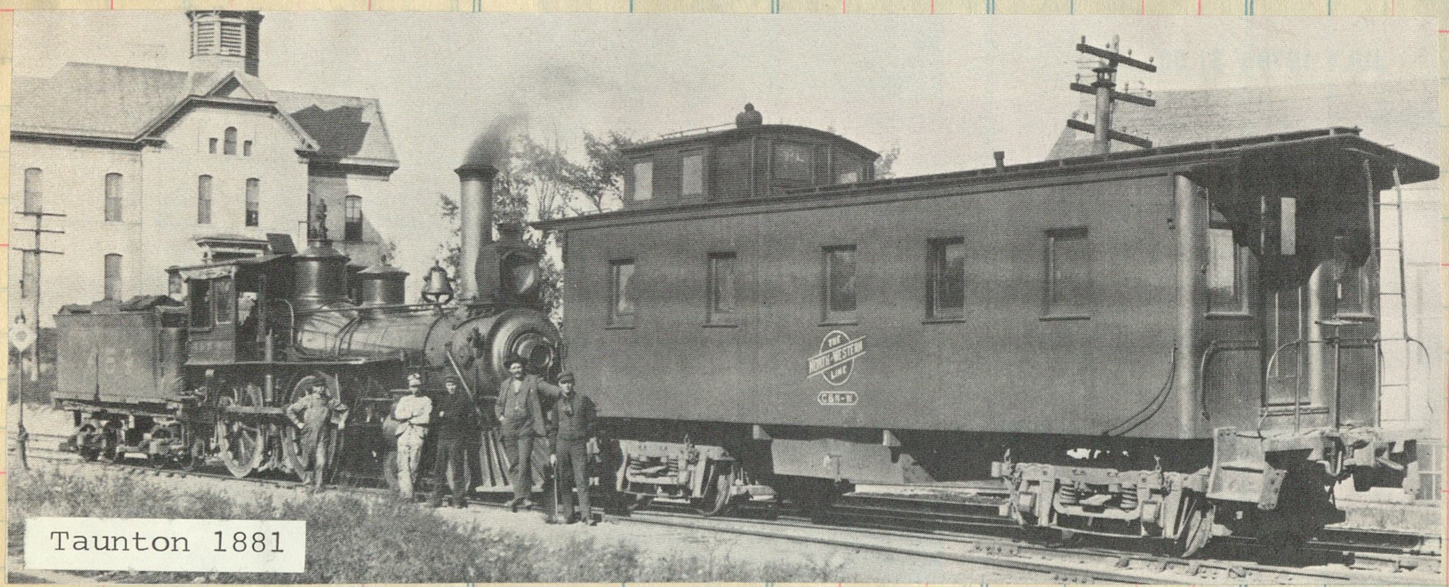


1869

Early American Type Locomotives, Built by The Baldwin Locomotive Works

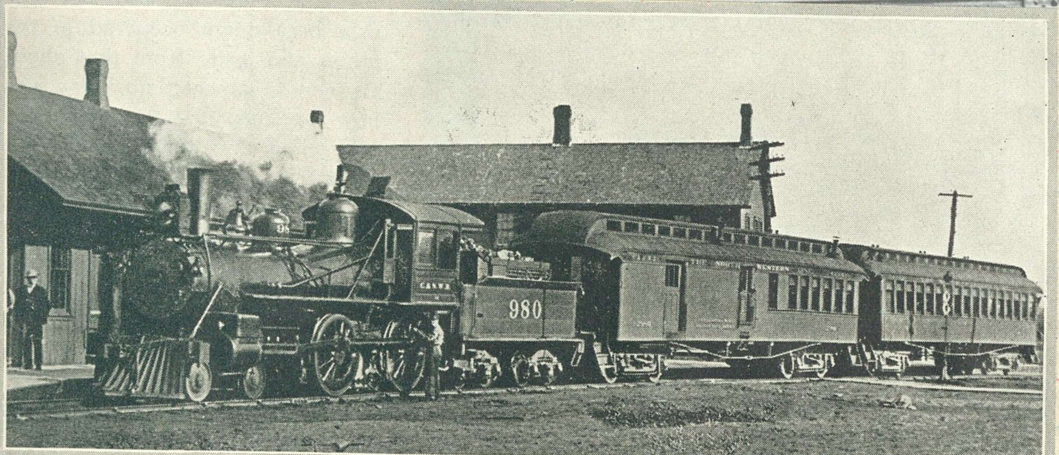


Schenectady 1886
Retired in 1935!!

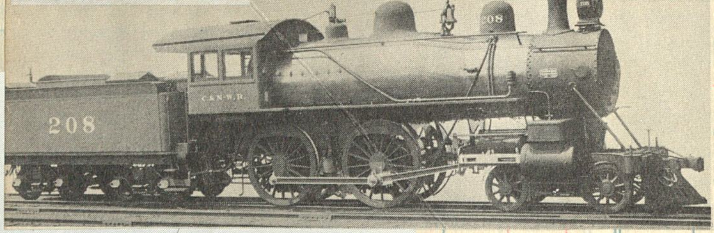


Taunton 1881

The little Eight wheeler #454 appears small enough to fit inside the hack she's coupled to.

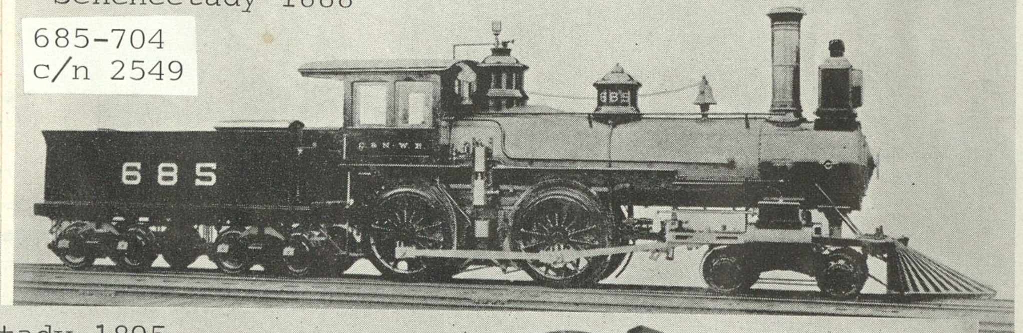


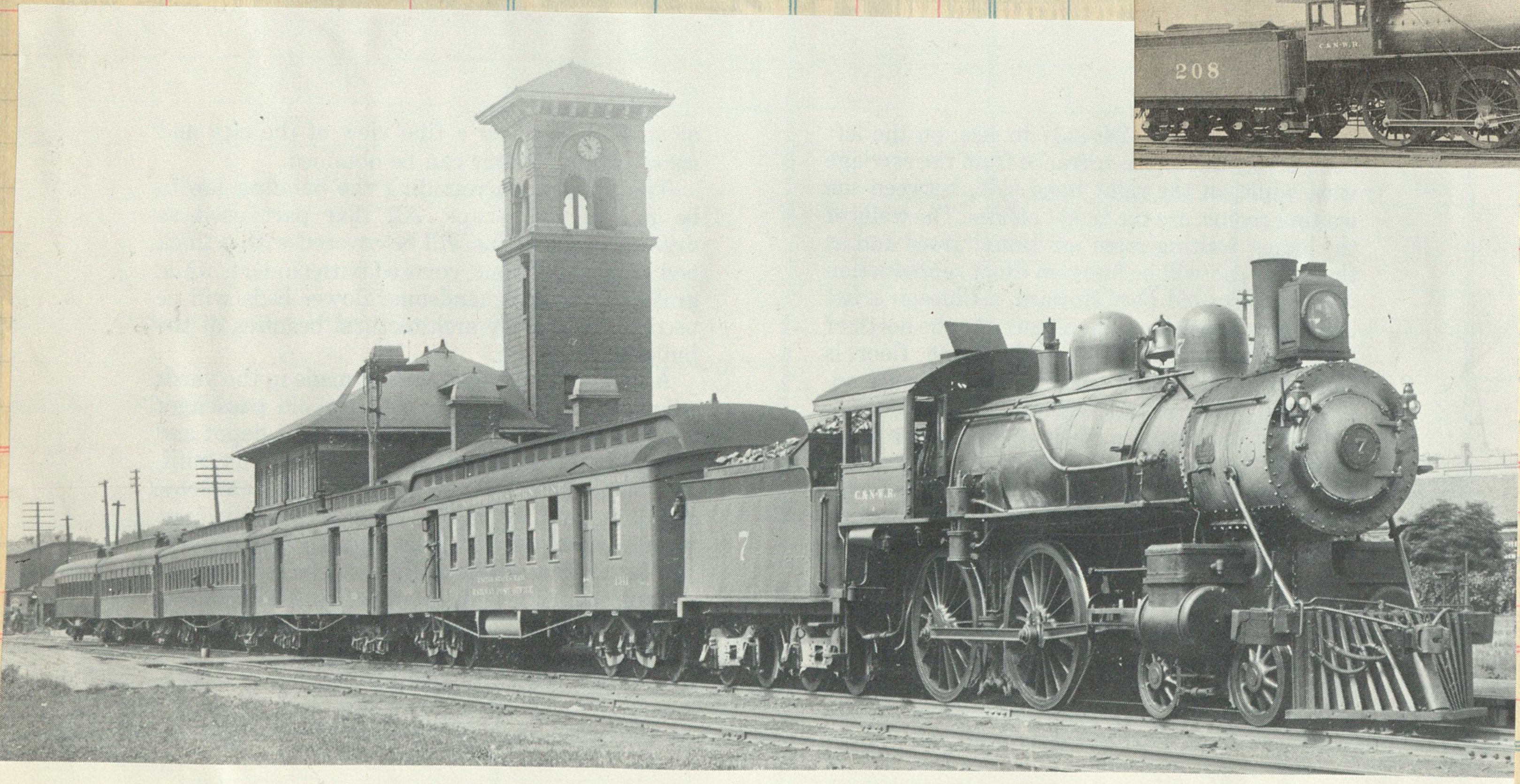
Schen 1899



Schenectady 1888

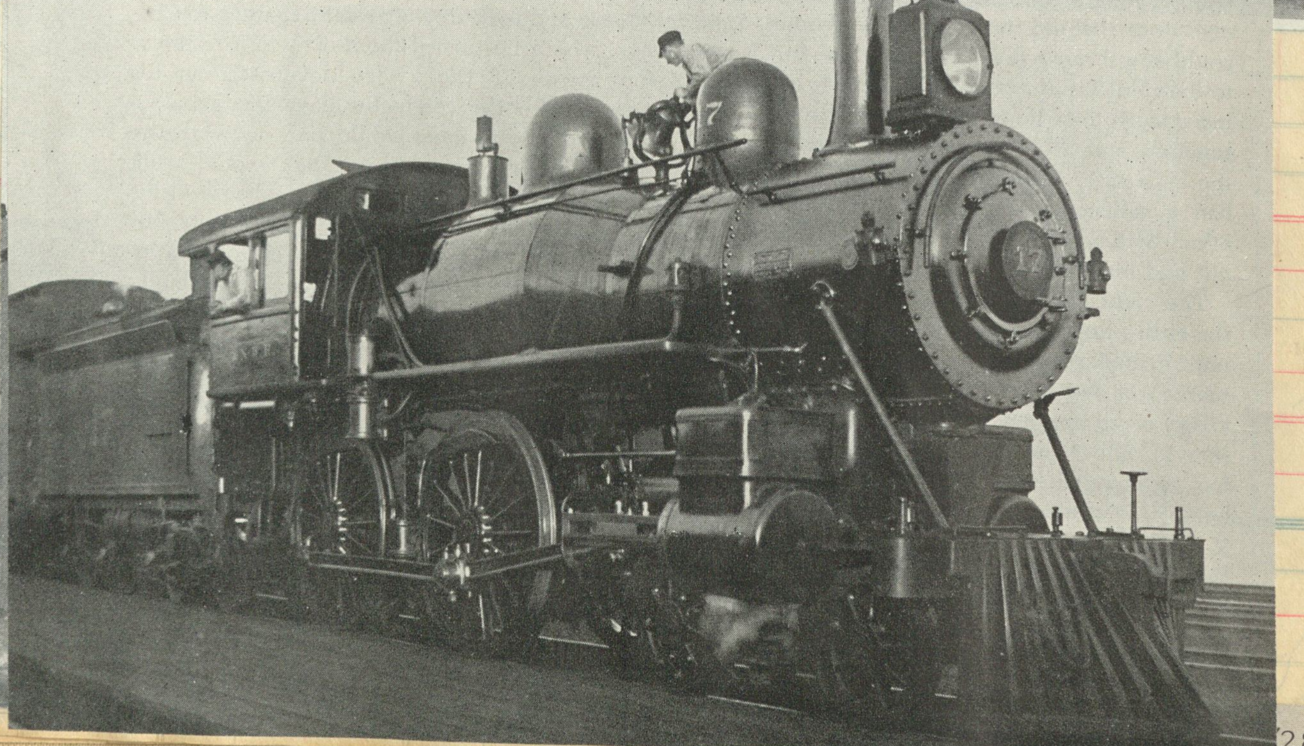
685-704
c/n 2549





The Green Bay Depot in 1905, six years after it was built. Comparison with later views indicate it was enlarged through the years. Engine 7's consist is Number 17, a through passenger train running between Chicago and Lake Linden, Michigan. Number 17 departed Chicago at 3:00 am, Daily except Sundays, and was scheduled to arrive in Green Bay at 9:50 am, departing at 9:55 am. Engine 7, a class A, 4-4-0 type was built by Schenectady in 1895 and scrapped in 1935. The head car, 1341, is a Railway Post Office car and the second car is a baggage car which is most unusual in that it has vestibules. Photo by J. Foster Adams, courtesy of Mid-Continent Railway Museum & Wisconsin State Historical Society.

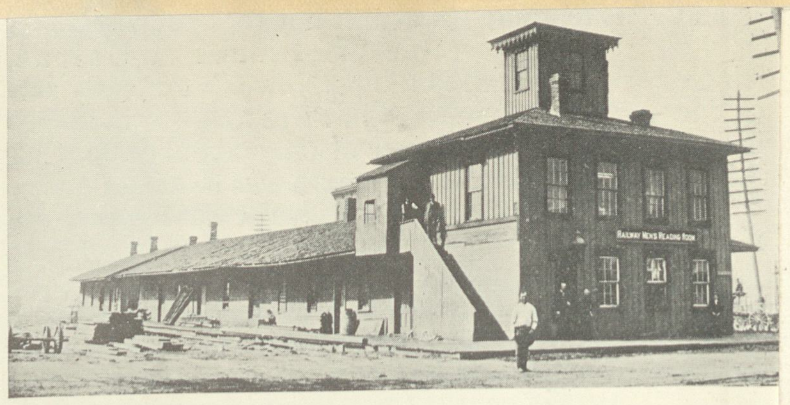
#17 Schenectady 1895

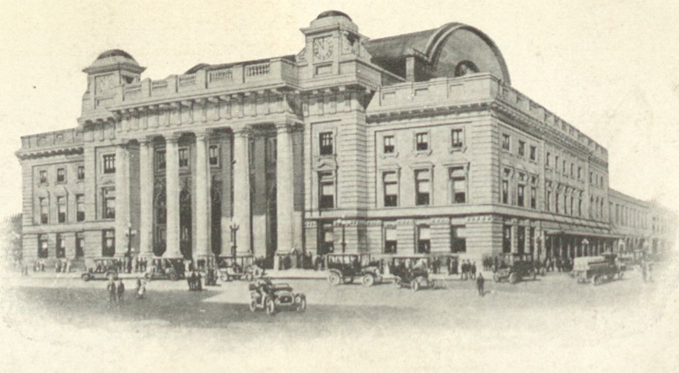


28/98

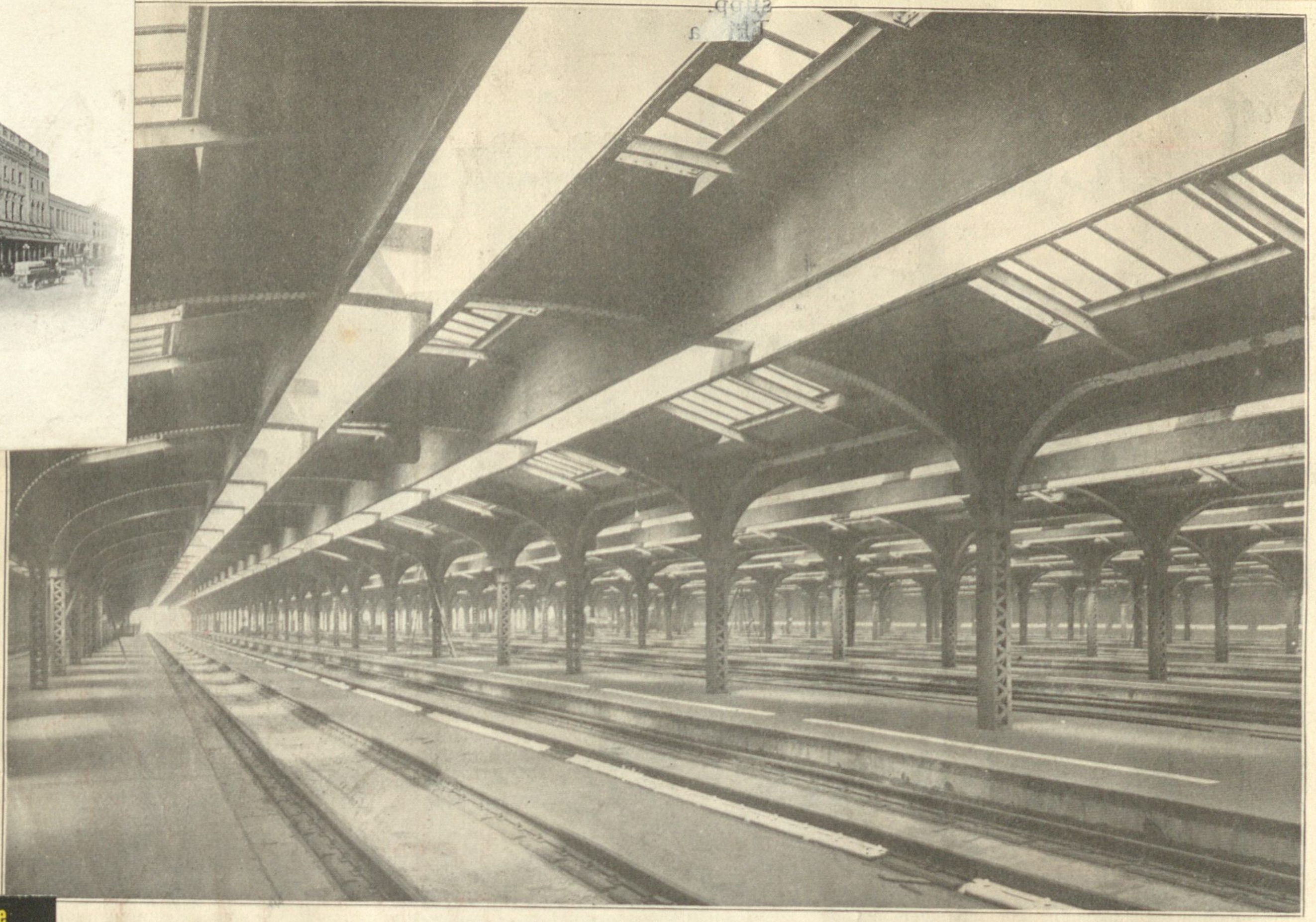
13

Clos. No. Sold Amount Clo





CHICAGO & NORTHWESTERN RY.
CHICAGO PASSENGER TERMINAL



C. & N. W. Ry. Train Shed at Chicago

OKM

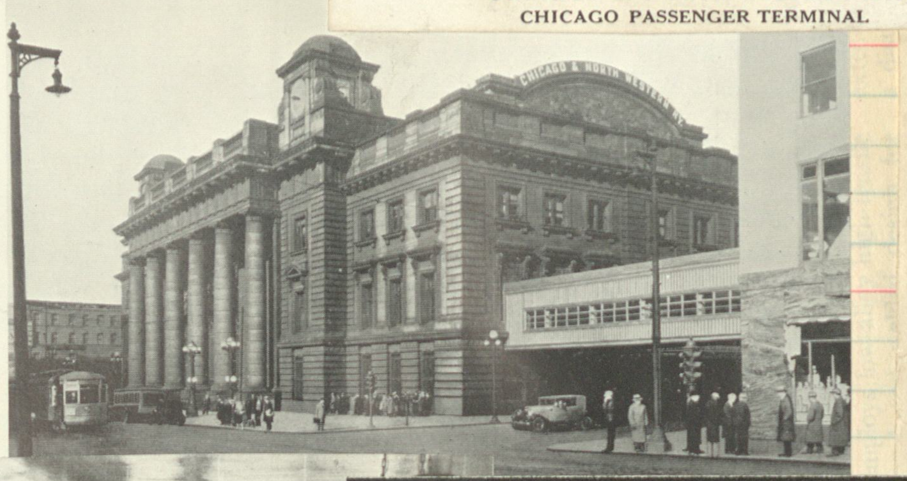
Sold Amount

**Above—The First Permanent Railroad Station in Chicago**

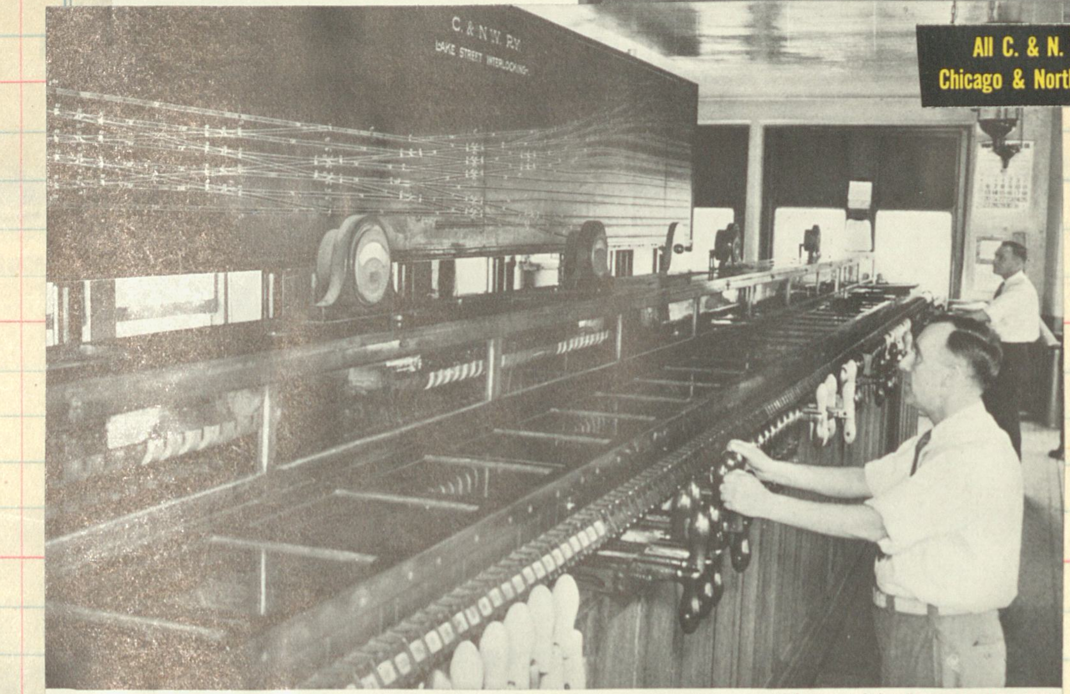
This frame building, the first section of which was completed in 1852, stood on the site of the present Merchandise Mart.

**Right—The Present Chicago Passenger Terminal of the Chicago and North Western Railway**

This fine building was placed in service in 1911. Recent improvements include the pedestrian bridge across Canal Street, shown in the illustration, which provides quick entrance and exit for 80,000 commuters daily.



**All C. & N. W. Ry. trains leaving and arriving at Chicago use Chicago & North Western's own station, Canal and Madison Streets.**



Photograph by J. Baylor Roberts

BY ILLUMINATED MAP AND INTRICATE LEVERS 267 TRAINS ARE ROUTED DAILY

There are 170 working levers in this Lake Street Tower of the Chicago and North Western Railway Station at Chicago. Six main tracks branch out to 16 in the train shed, over which nearly 60,000 passengers arrive and depart every 24 hours. The light-colored levers control signals, the dark ones operate switches. Interlocking devices prevent clear signals being set on occupied tracks. In and out of this station daily runs the "millionaire club car," the "Deerpath," attached to a suburban train. Members charter the car, engage their own attendants, and vote on new admissions from a long waiting list. A golf special is operated Saturdays to North Shore points. All trains of the Chicago and North Western run on the left-hand tracks, as they do on English lines, because early double tracking was constructed by British and Dutch engineers.

## To Serve You in CHICAGO

**MADISON STREET STATION**
Canal and Madison Streets, Chicago

The Chicago and North Western Passenger Station in Chicago is equipped to provide every possible service to the traveler entering, leaving or passing through Chicago. It is truly "A city in itself."

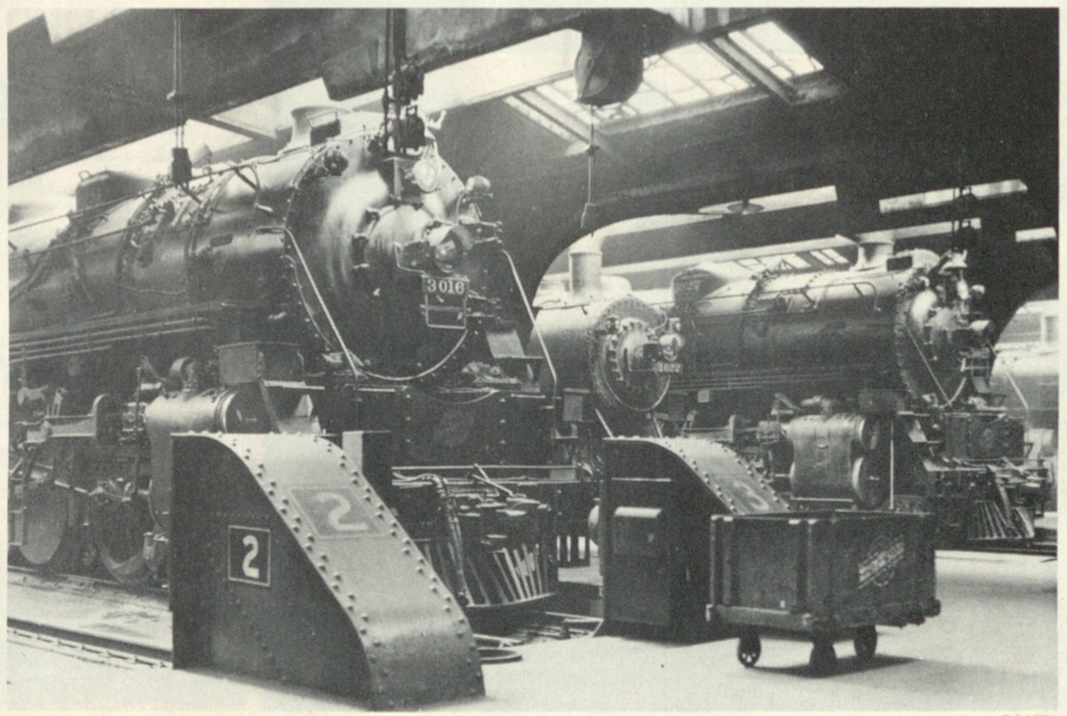
Information bureaus, check rooms, telegraph office, phone booths, drug stores, shops with travelers' necessities, barber shops, steam baths for men, masseur, manicuring, hairdressing, shoe shining.

Appetizing food at moderate prices served in dining room, cafeteria, lunch room and tea room.

Special provision for the care of the sick, for women and children traveling alone, and for elderly persons. Cozy, comfortable retiring rooms in charge of experienced matrons—and a nursery for children.

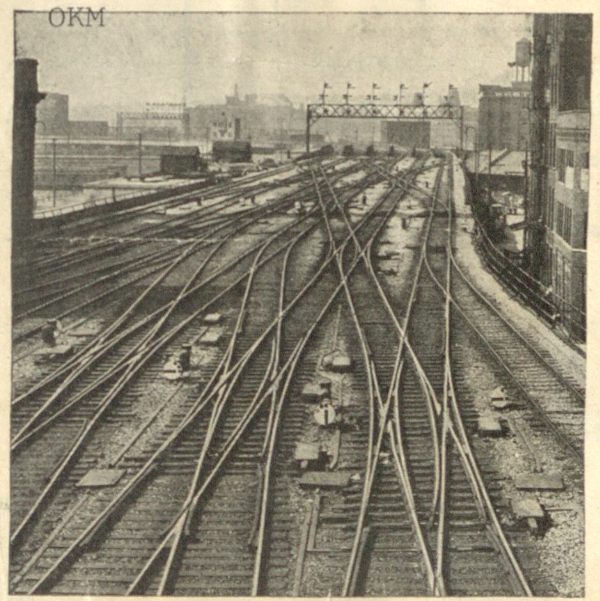
Convenient connections may be made from this station to other Chicago passenger stations with trains leaving for Eastern and Southern destinations. Free Parmelee transfer for all passengers whose tickets are routed "Through Chicago."

T. S.

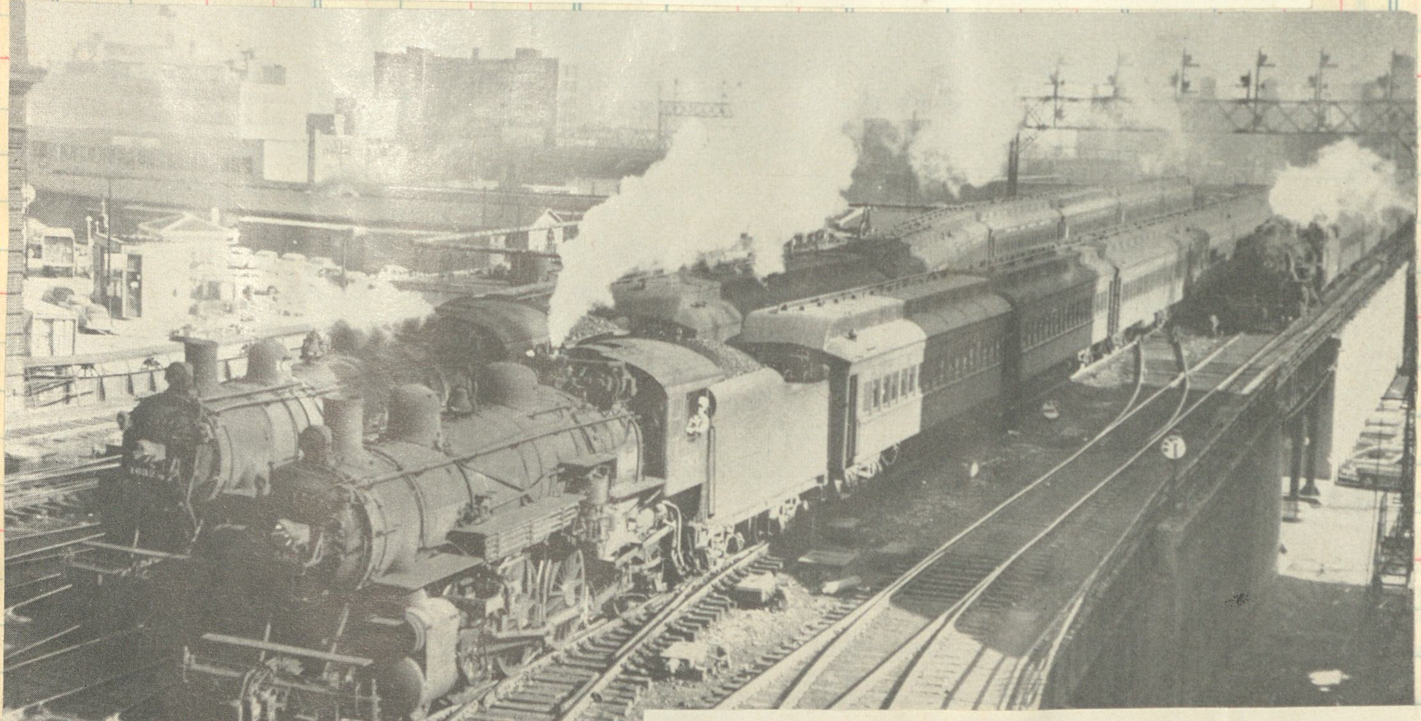


C&NW

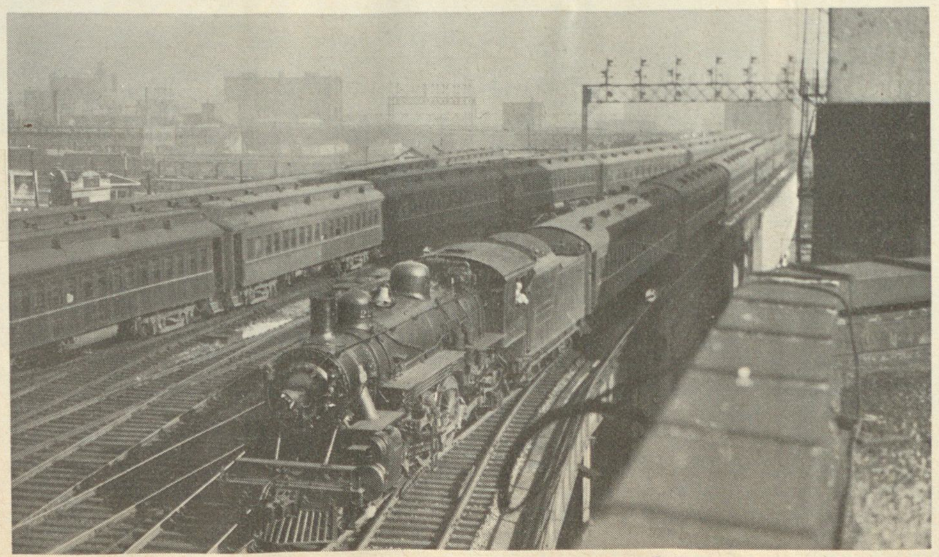
OKM



Electric Interlocking C. & N. W. Terminal



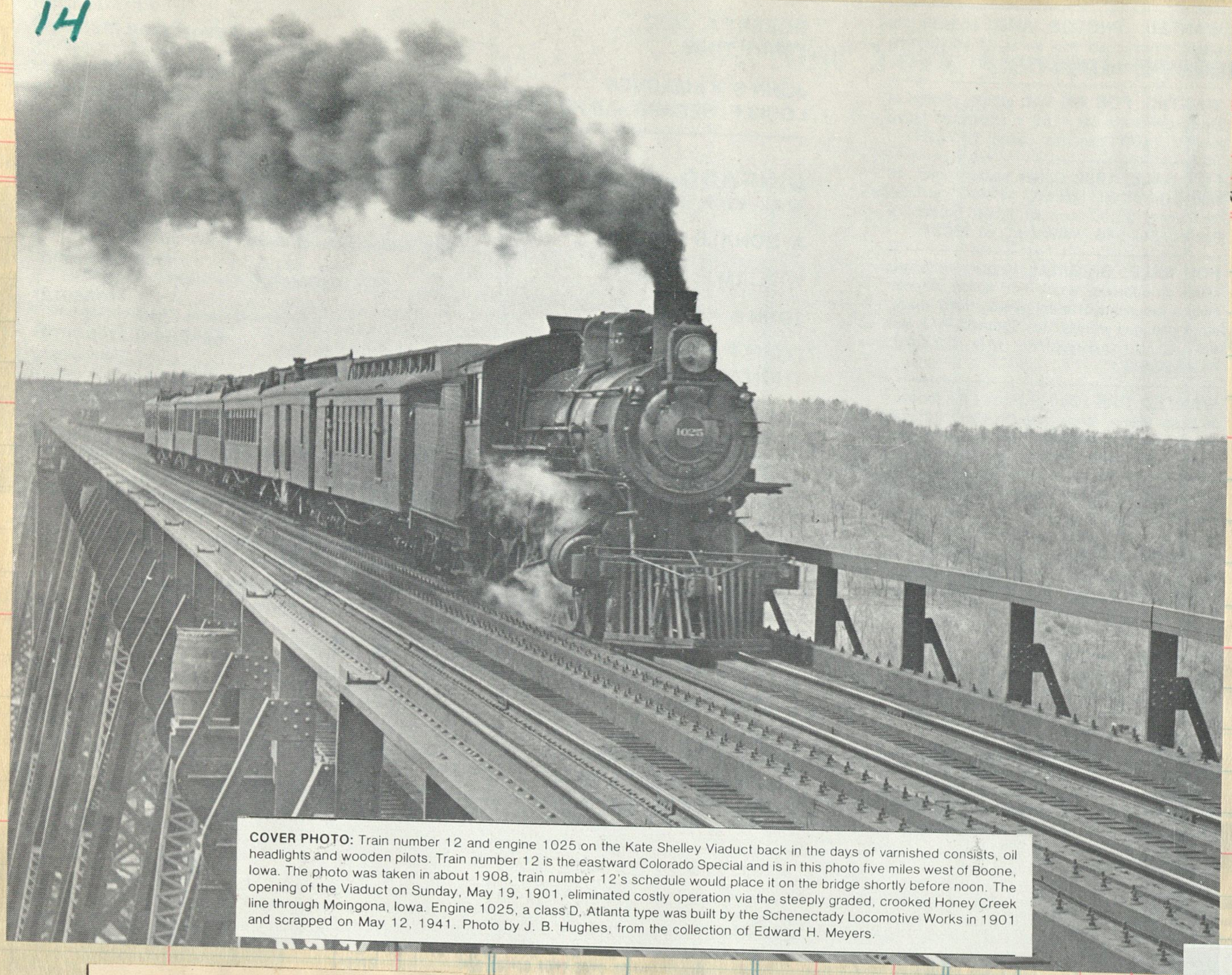
Three trainloads of the 65,000 commuters which the Chicago & North Western carries in and out of Chicago each weekday roll down the throat which feeds this morning rush into C&NW's Madison Street terminal.



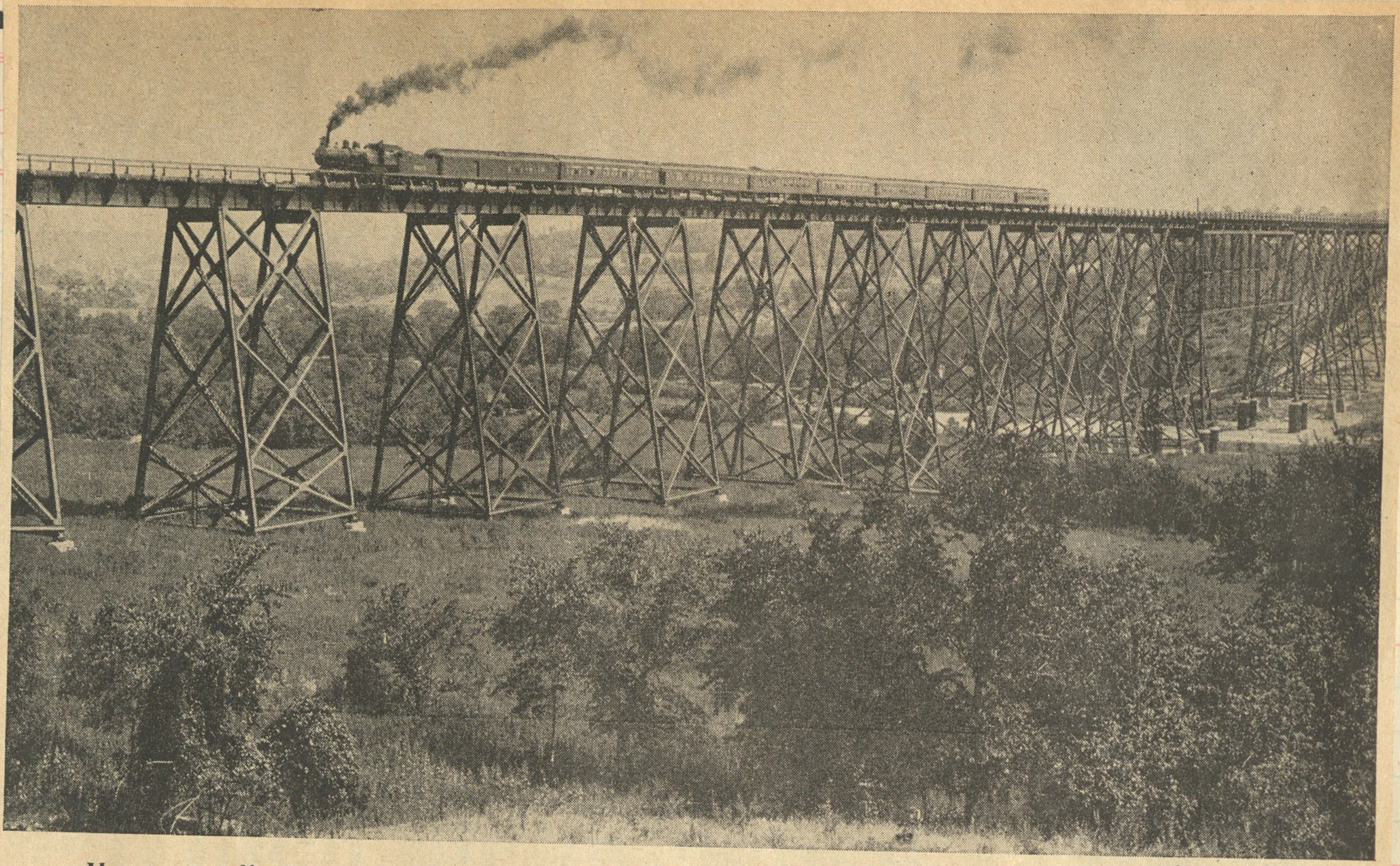
Rail Photo Service: H. W. Pontin.

**POLISHED North Western Pacific No. 2207 arrives at Lake Street Tower, Chicago.**

14

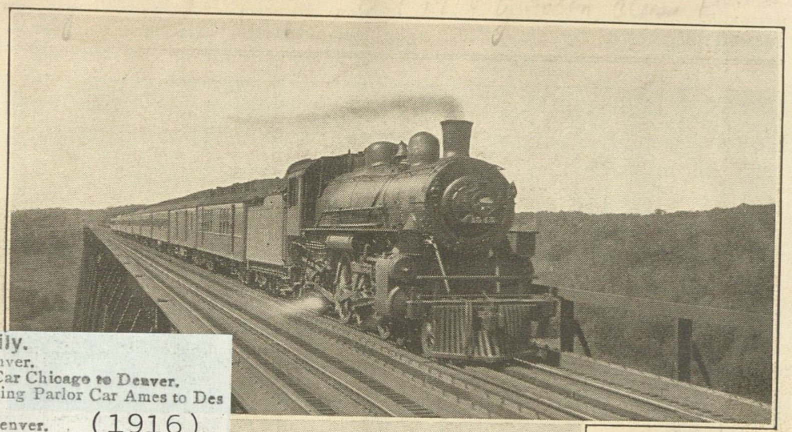


**COVER PHOTO:** Train number 12 and engine 1025 on the Kate Shelley Viaduct back in the days of varnished consists, oil headlights and wooden pilots. Train number 12 is the eastward Colorado Special and is in this photo five miles west of Boone, Iowa. The photo was taken in about 1908, train number 12's schedule would place it on the bridge shortly before noon. The opening of the Viaduct on Sunday, May 19, 1901, eliminated costly operation via the steeply graded, crooked Honey Creek line through Moingona, Iowa. Engine 1025, a class D, Atlanta type was built by the Schenectady Locomotive Works in 1901 and scrapped on May 12, 1941. Photo by J. B. Hughes, from the collection of Edward H. Meyers.



Chicago & North Western

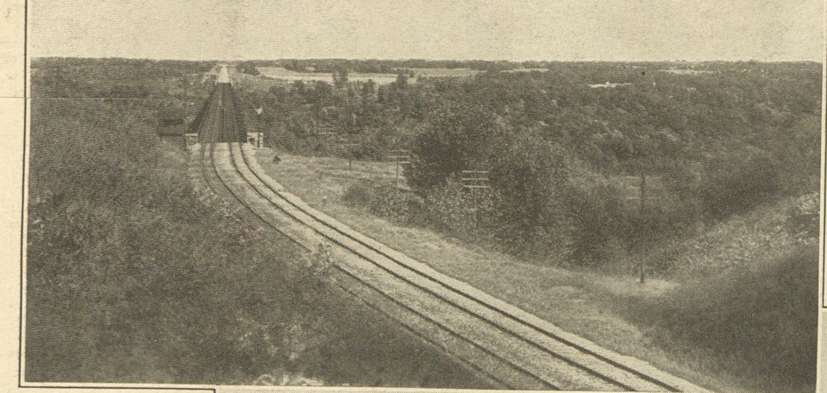
Monument to a fifteen-year old heroine; the ***Kate Shelley*** bridge across the Des Moines River near Boone, Ia. Old photo shows Chicago North Western ***Atlantic*** wheeling over the deck-girder structure built in 1901



The Colorado Special crossing the Boone Viaduct

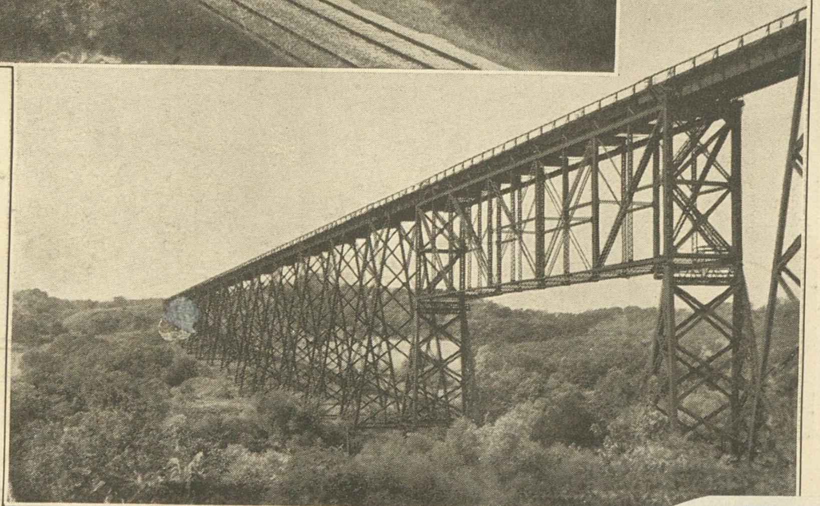
**No. 13—The Colorado Special. Daily.**
Observation Car service Chicago to Denver.
Drawing-room Compartment Sleeping Car Chicago to Denver.
Parlor Car Chicago to Omaha (connecting Parlor Car Ames to Des Moines on No. 5).
Free Reclining Chair Car Chicago to Denver.
Dining Car, serving all meals a la carte.

(1916)



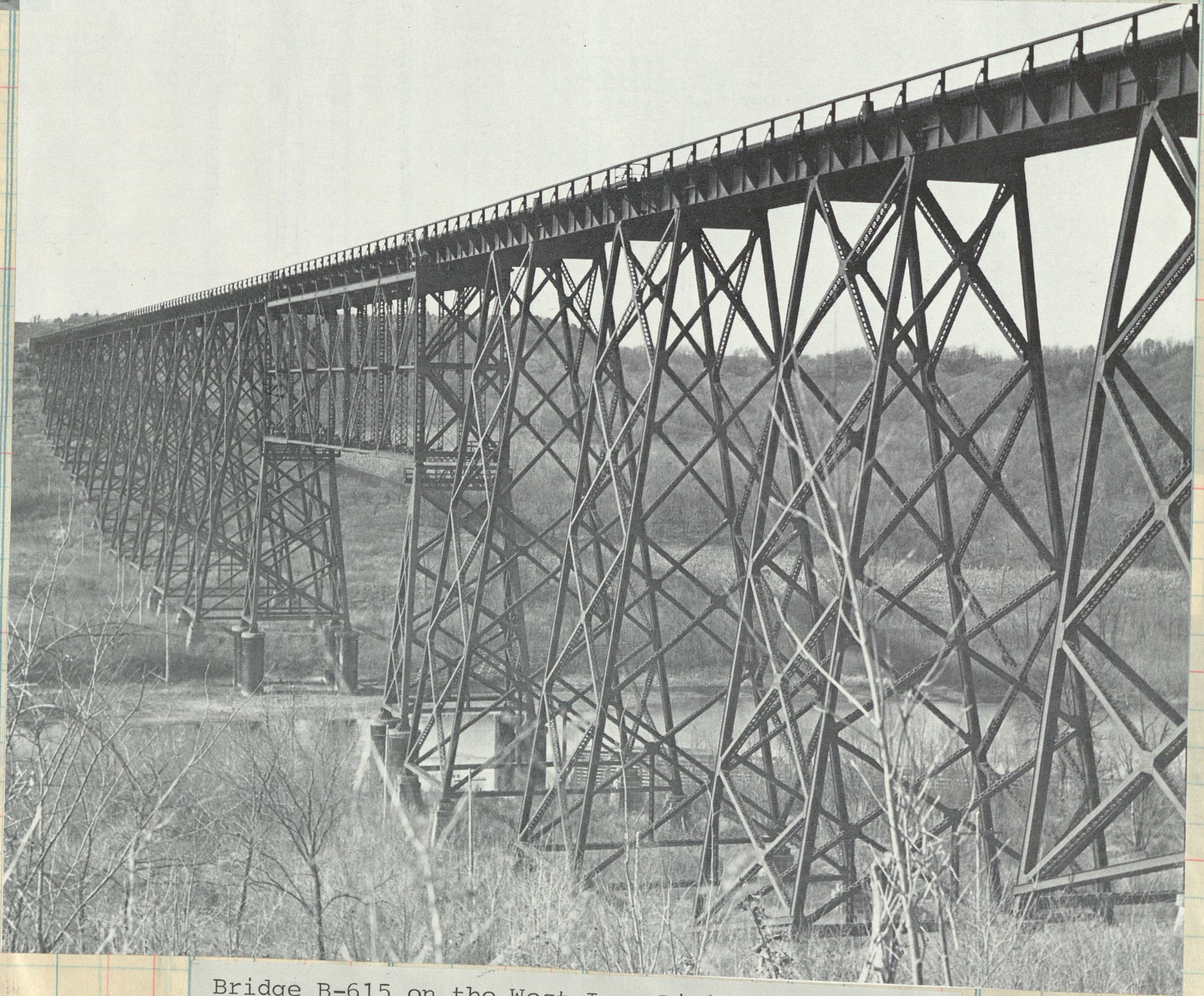
Looking East across the Boone Viaduct towards Boone, Iowa

1915

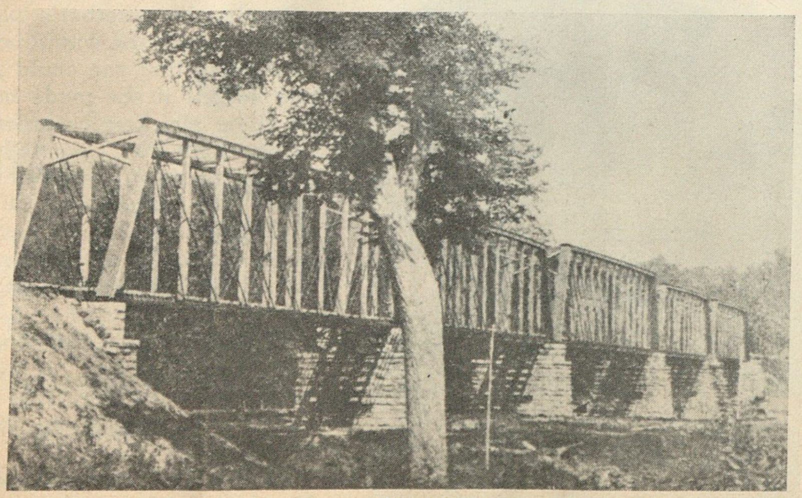


Half Section of the Boone Viaduct looking West

OKM

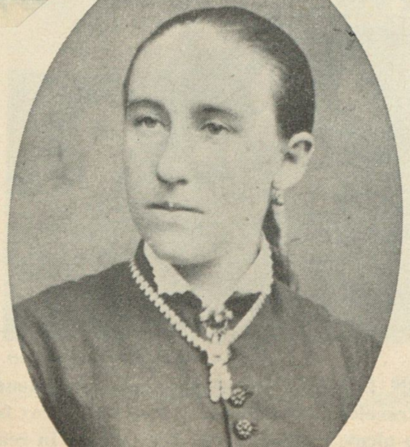


Bridge B-615 on the West Iowa Division over the Des Moines River. Known as the Boone Viaduct or the Kate Shelley bridge located five miles west of Boone, Iowa. Built 1899-1901, opened for traffic May 19, 1901, is the largest double track railroad bridge in the world. Length 2,685 feet and 185 feet high. Cost $963,000, a sizeable amount for that time.

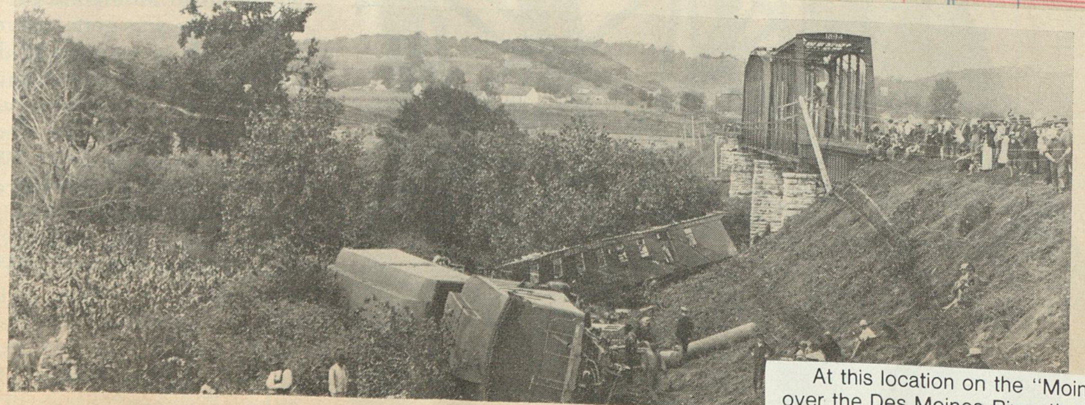


All photos this page, collection of Edward H. Meyers.

**SHADOWS** beneath the 696-foot-long bridge over Des Moines River, which Kate Shelley crawled across, give graphic description of distance between ties.



**KATE** had still not recovered from her ordeal when this was taken in August 1881.



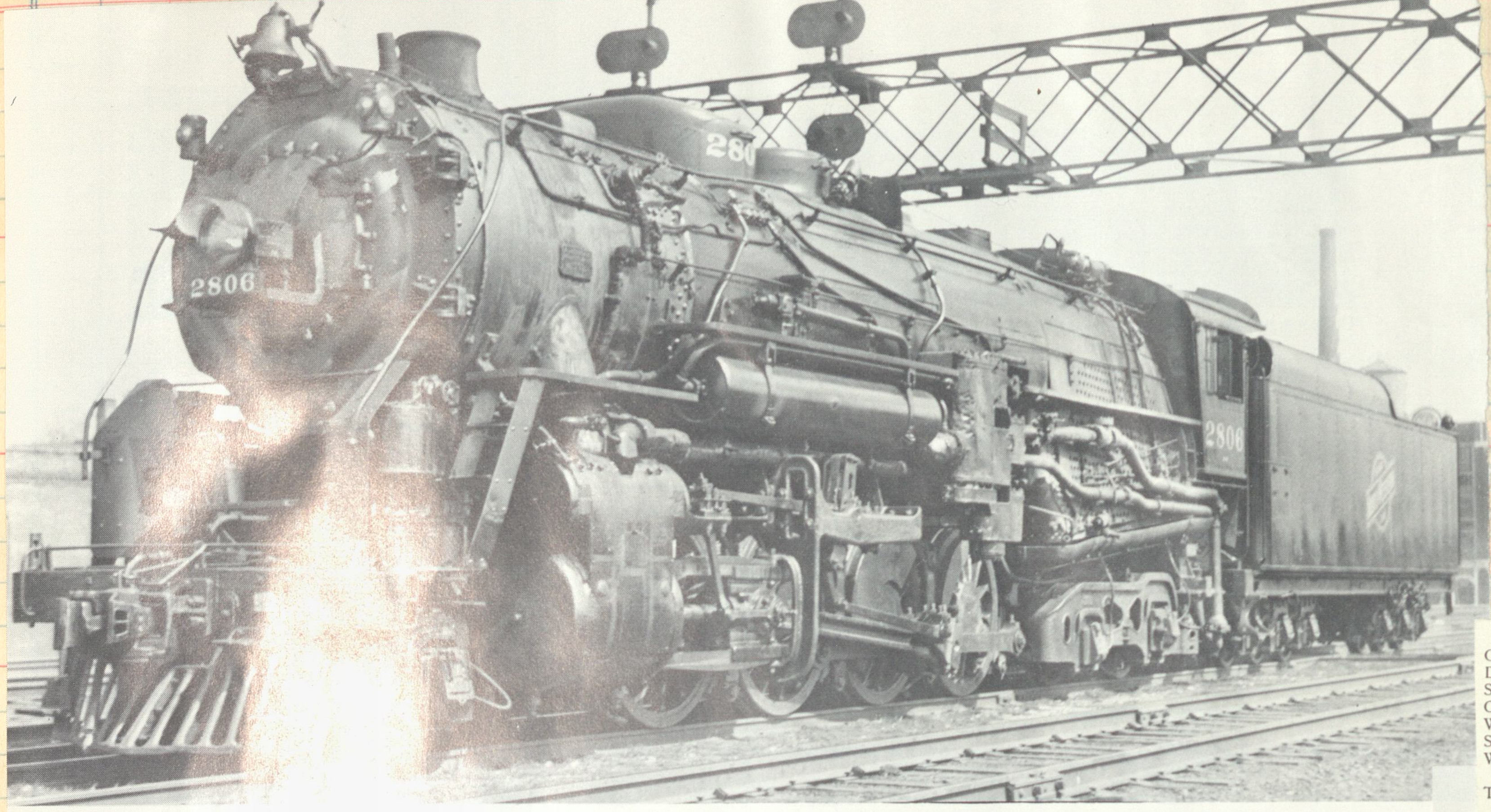
At this location on the "Moingona Bypass" stood the bridge over the Des Moines River that Kate Shelley crossed in 1881. This bridge was erected in 1894.

**THE FAST MAIL** left the rail to plunge down a steep embankment on "Shelley Curve" on August 1, 1899.

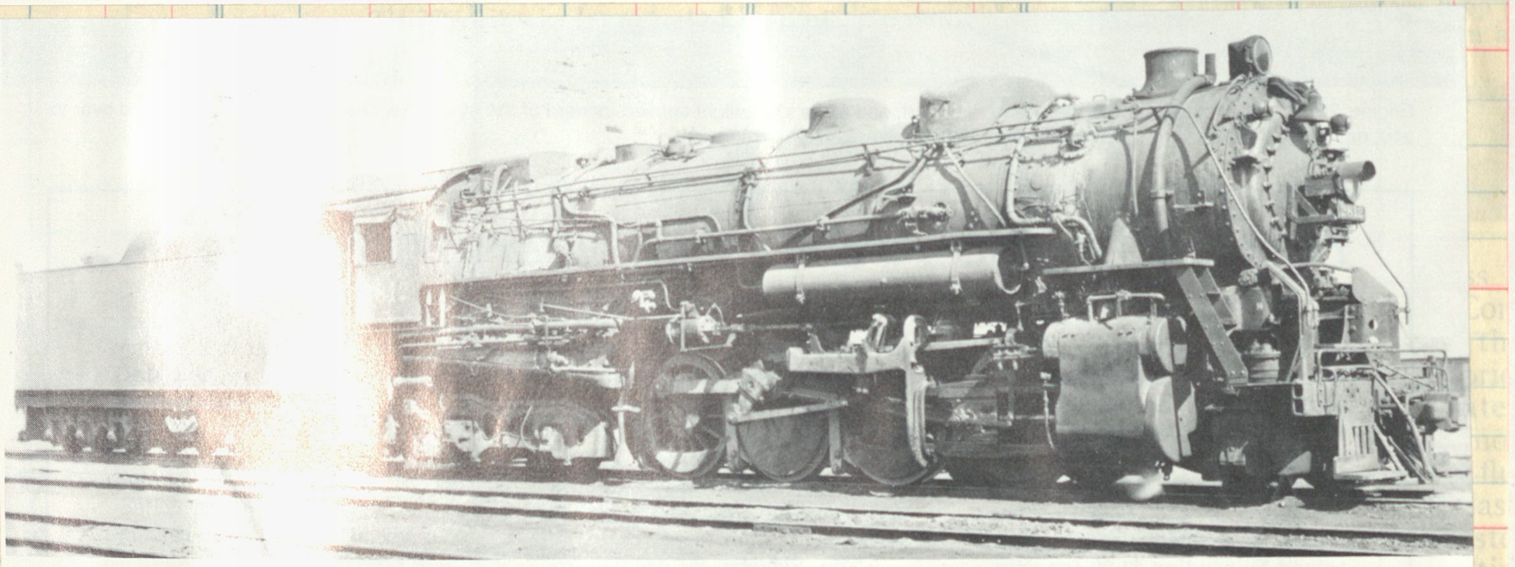
Clos. No. Sold Amount Clos.

CLASS J-4
Diagram on page 147-E

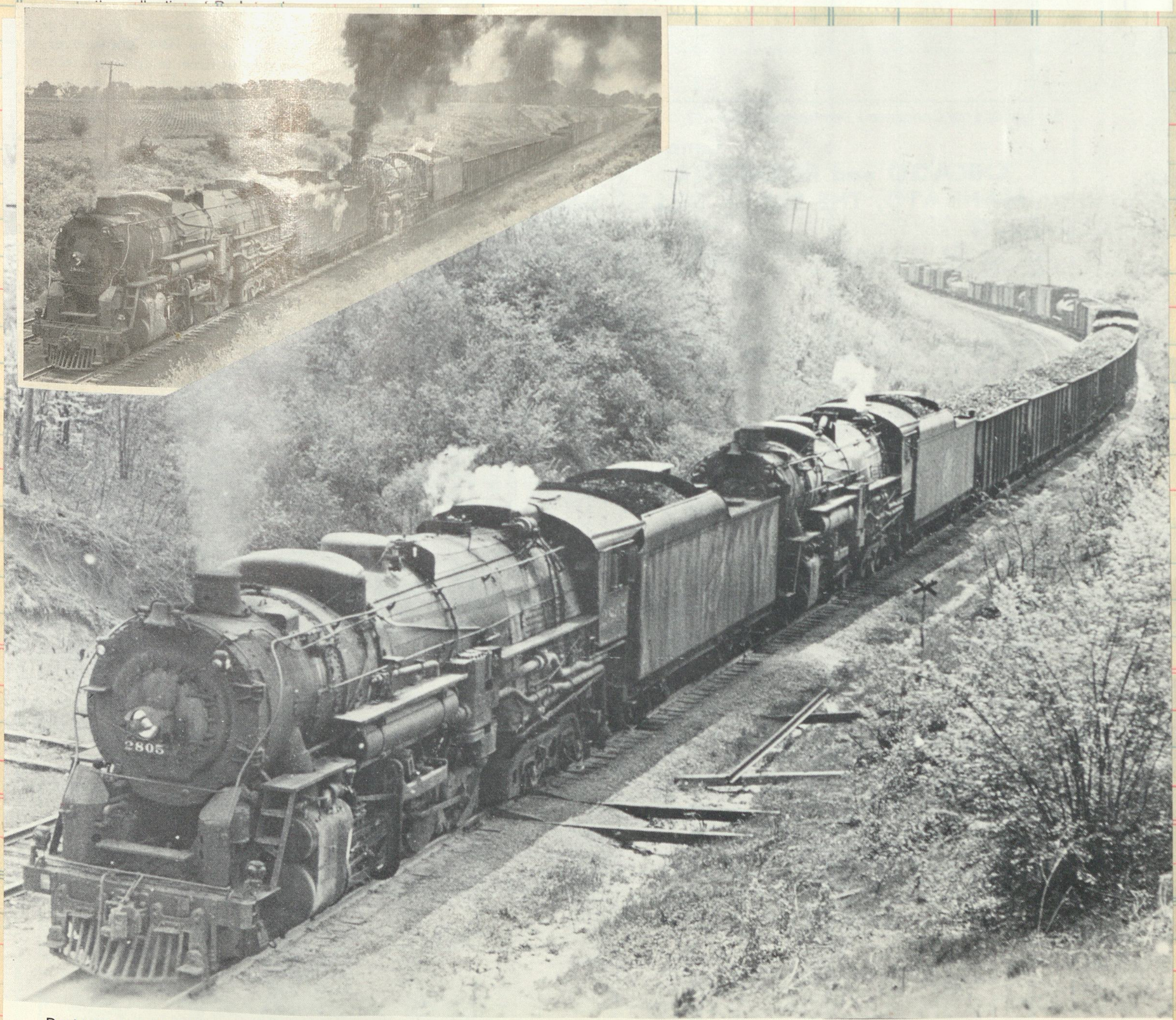
| Eng. No. | When Built | Builder |  | Date of Delivery |  |  | Eng. No. | When Built | Builder |  | Date of Delivery |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | No. | Name | Year | Month | Day |  |  | No. | Name | Year | Month | Day |
| 2801Q | Aug. 1927 | 67372 | Dunkirk | 1927 | Sept. | 3 | 2807Q | Aug. 1927 | 67378 | Dunkirk | 1927 | Sept. | 7 |
| 2802Q | Aug. 1927 | 67373 | Dunkirk | 1927 | Sept. | 3 | 2808 | Aug. 1927 | 67379 | Dunkirk | 1927 | Sept. | 10 |
| 2803 | Aug. 1927 | 67374 | Dunkirk | 1927 | Sept. | 2 | 2809 | Aug. 1927 | 67380 | Dunkirk | 1927 | Sept. | 10 |
| 2804 | Aug. 1927 | 67375 | Dunkirk | 1927 | Sept. | 2 | 2810 | Aug. 1927 | 67381 | Dunkirk | 1927 | Sept. | 19 |
| 2805 | Aug. 1927 | 67376 | Dunkirk | 1927 | Sept. | 7 | 2811Q | Aug. 1927 | 67382 | Dunkirk | 1927 | Sept. | 19 |
| 2806 | Sept. 1927 | 67377 | Dunkirk | 1927 | Oct. | 15 | 2812Q | Sept. 1927 | 67383 | Dunkirk | 1927 | Sept. | 23 |



Engine 2806 at [illegible] Chicago, Illinois on March 20, 1939. Photo by H. Gabrielson, from the collection of C. T. Felstead.

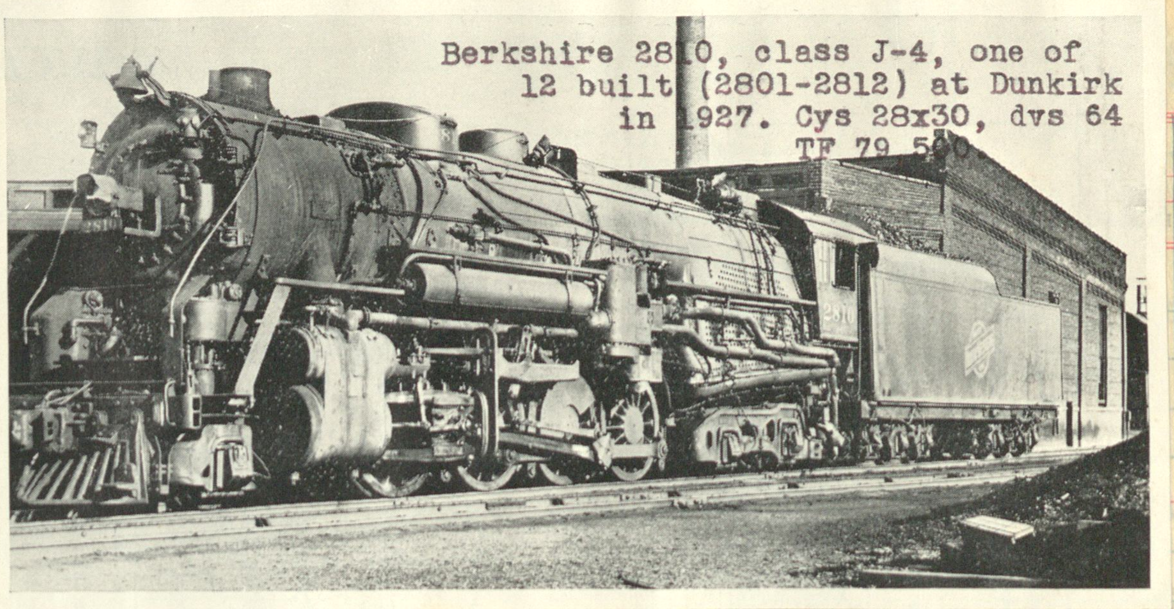


Engine 2812 at Chicago in January of 1951. Footboards have been added to her pilot suggesting use in yard or way-freight service. Photo from [illegible]

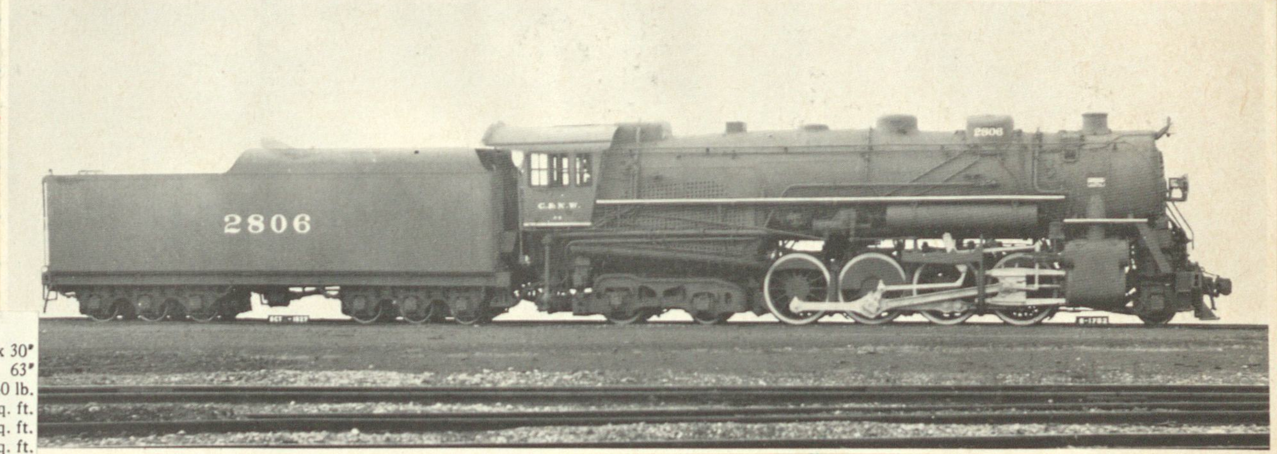


Doubleheaded J-4's blast their way uphill out of the Illinois River Valley on the Southern Illinois District of the Galena Division. Engine 2805 and her sister are 2-8-4 type locomotives built in 1927 at the Dunkirk Works of the American Locomotive Company. From the collection of Roland Wicke.

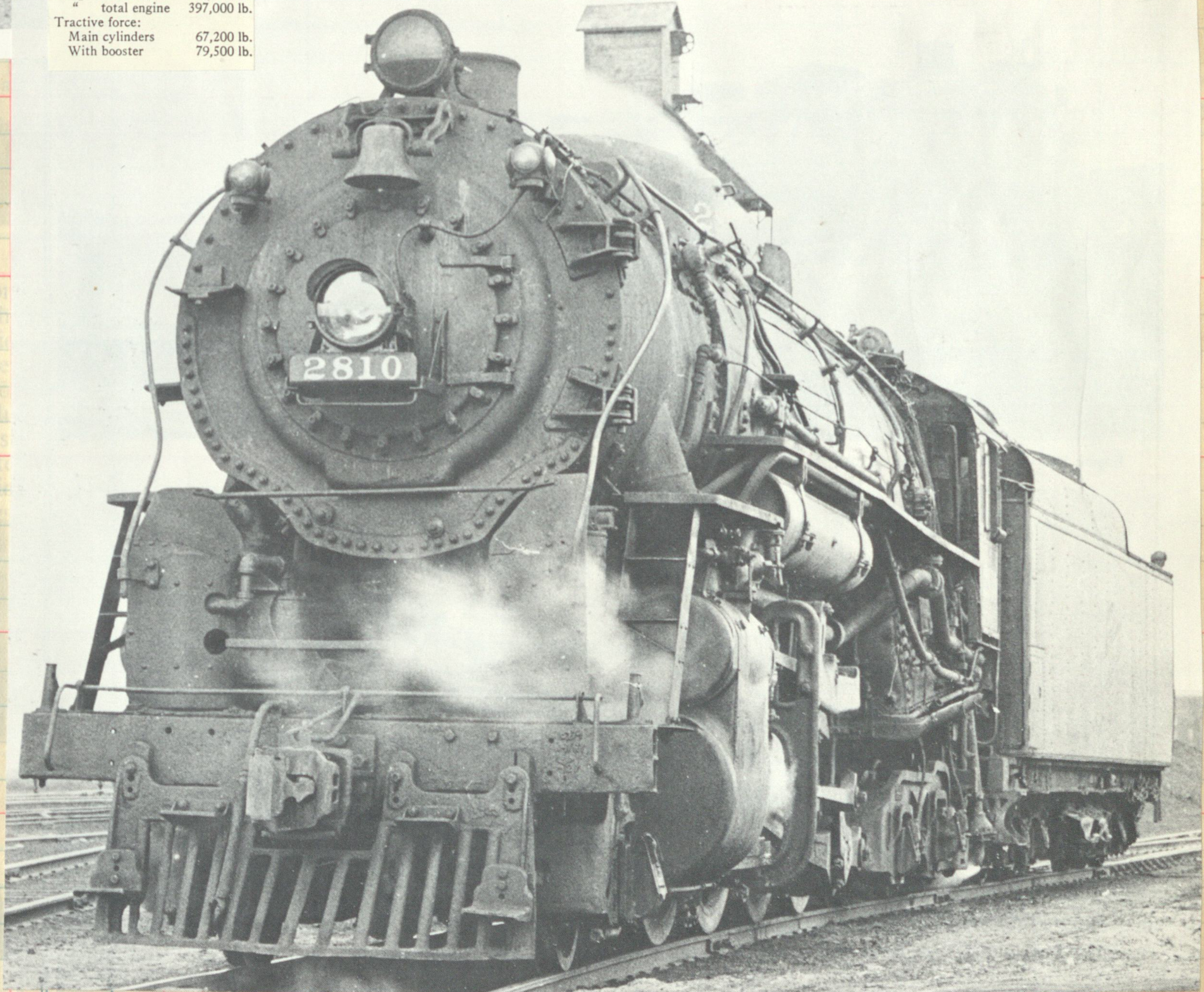
Clos. No. Sold Amount

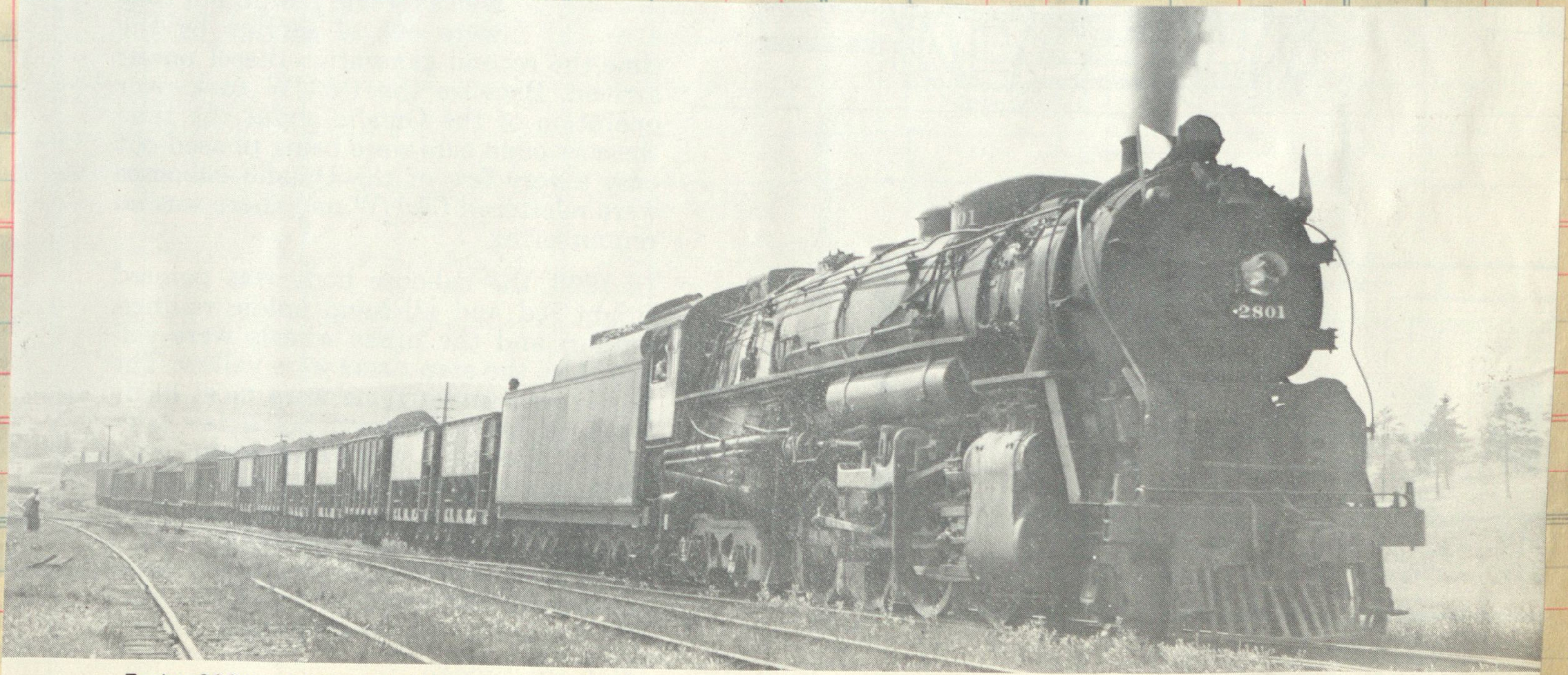


Berkshire 2810, class J-4, one of 12 built (2801-2812) at Dunkirk in 1927. Cys 28x30, dvs 64 TF 79 500.



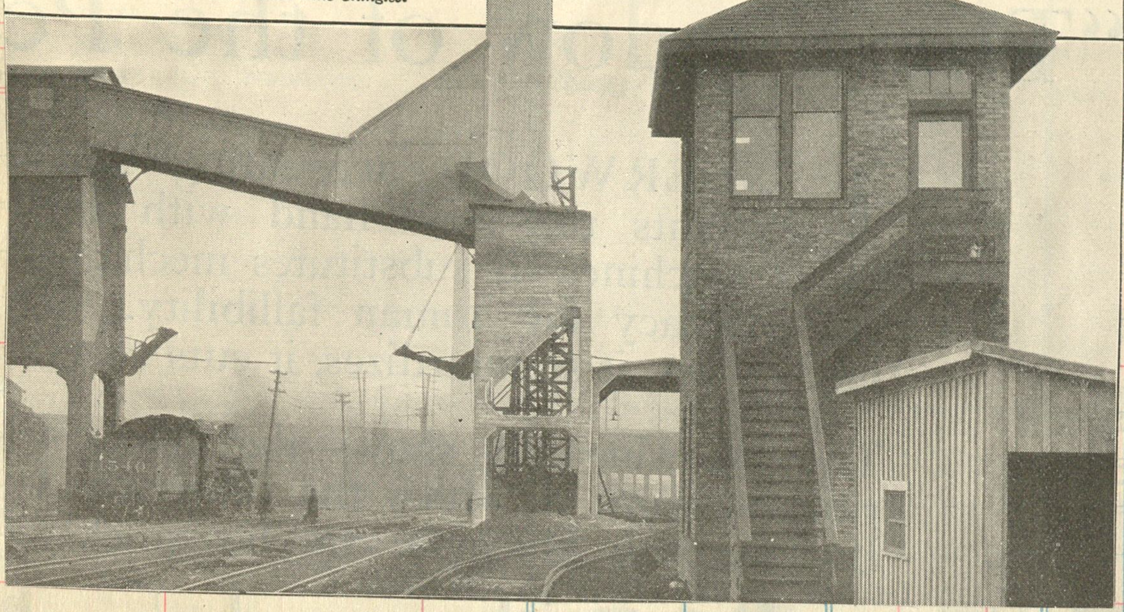
| | |
|---|---|
| Cylinders | 28" x 30" |
| Drivers, diam. | 63" |
| Steam pressure | 240 lb. |
| Grate area | 100 sq. ft. |
| Water heating surface | 4872 sq. ft. |
| Superheating surface | 2243 sq. ft. |
| Weight on drivers | 253,500 lb. |
| " total engine | 397,000 lb. |
| Tractive force: | |
| Main cylinders | 67,200 lb. |
| With booster | 79,500 lb. |

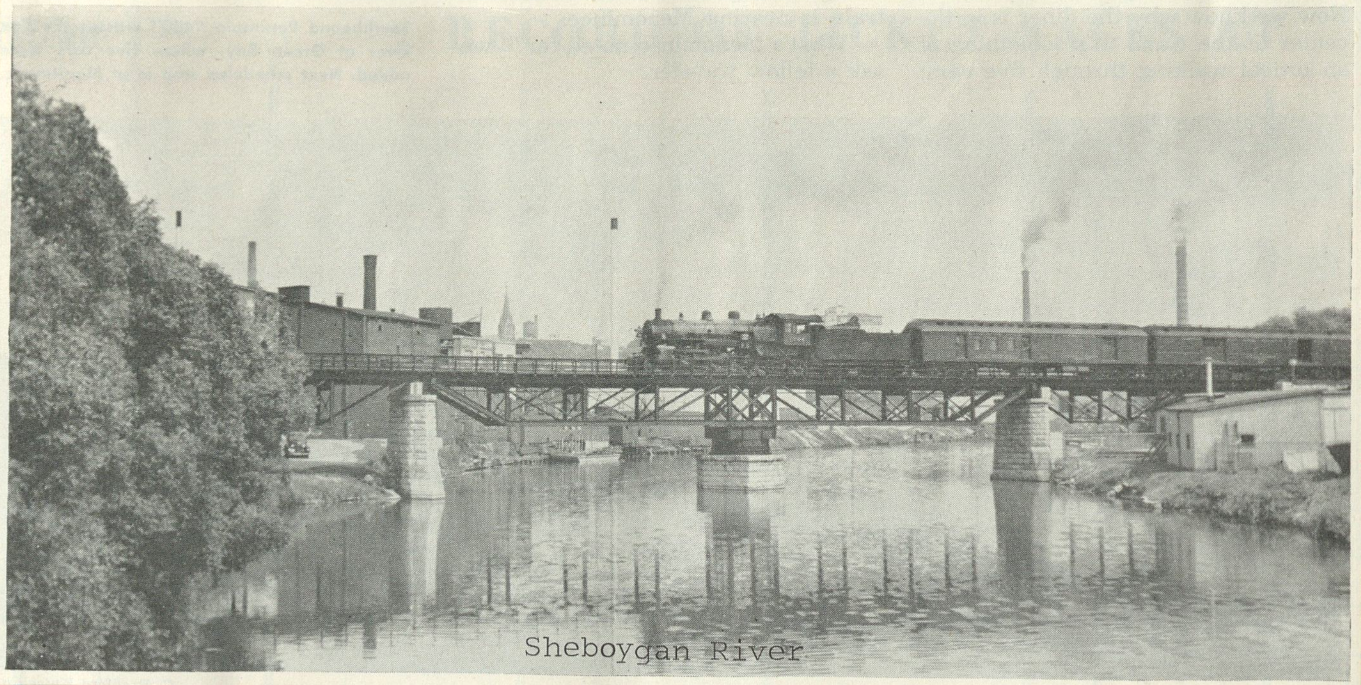




Engine 2801, running extra, is leaving the yard at Antoine, Michigan enroute to Escanaba. Her train consists of 58 loads of iron ore from the Gogebic Range near Ironwood, Michigan. The train will operate east via the Ore Line Subdivision to the number six ore yard in Escanaba. Photo by Donald Steffen on August 6, 1949.

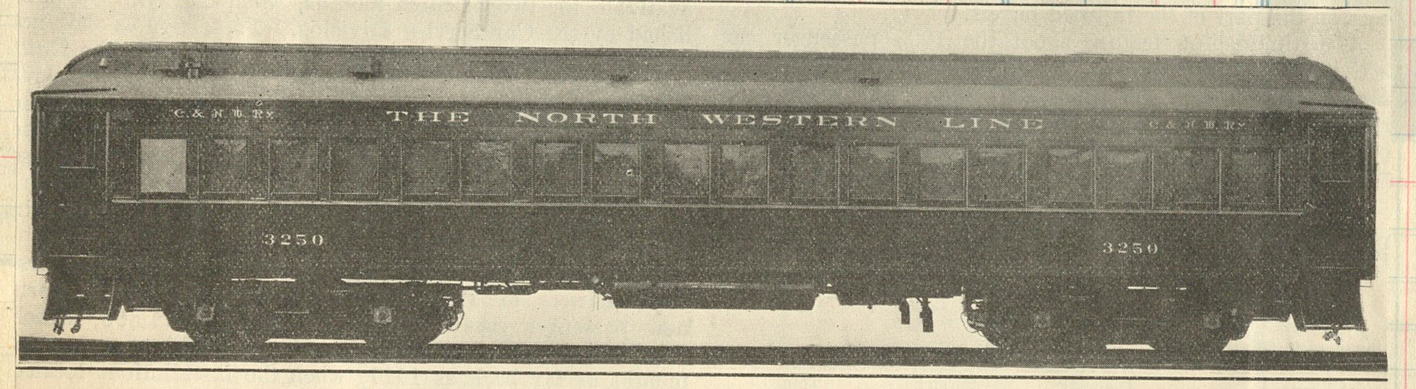
Erie Street Yards. Chicago, Illinois, of the Chicago Northwestern R. R., showing Coaling Station covered with Illinois Corrugated Zinc Sheets and a Signal Tower roofed with Illinois Zinc Shingles.



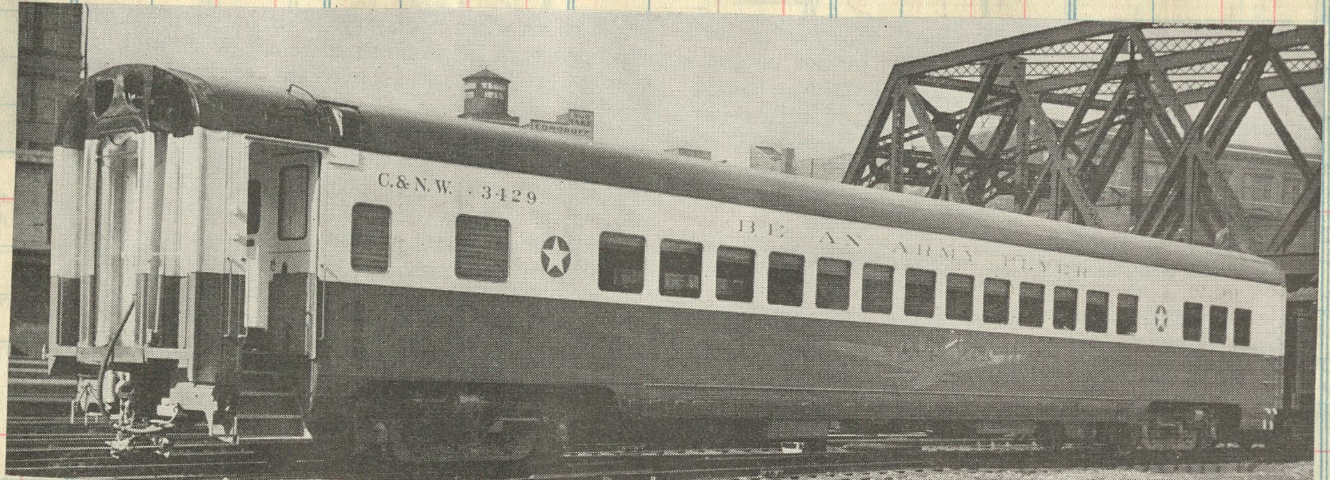


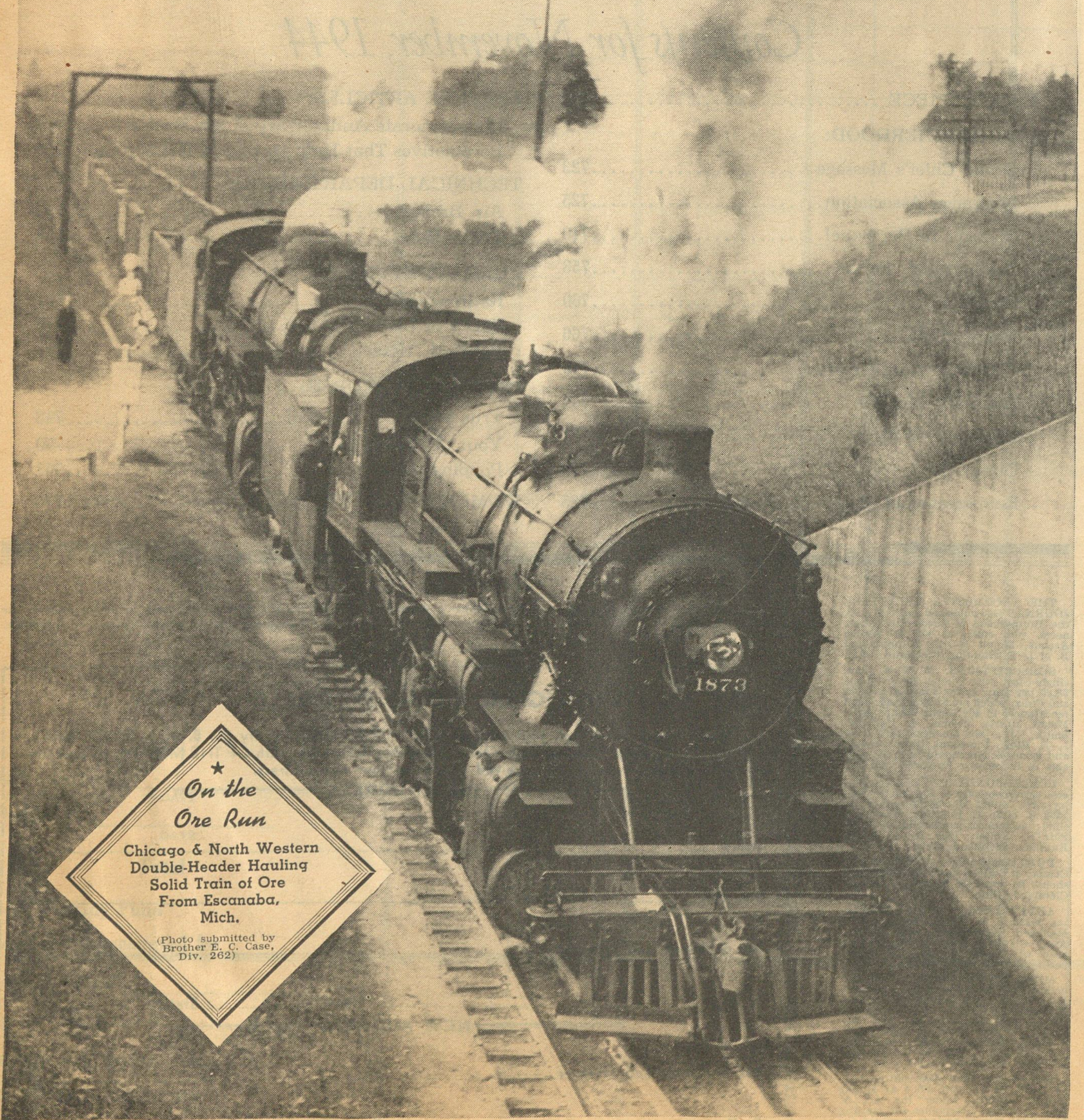
Sheboygan River

R. W. Campbell



Steel Passenger Coach Built for the Chicago & North Western by the American Car & Foundry Company 1923



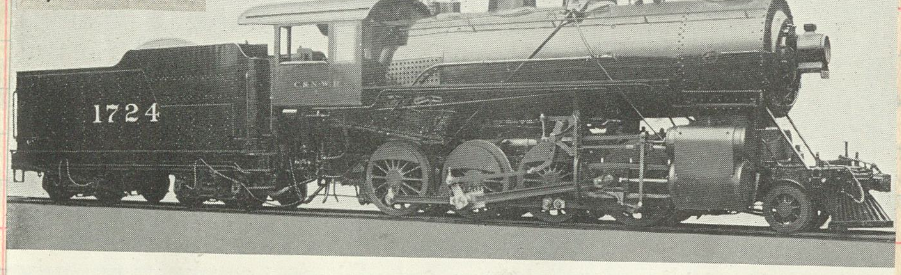


*On the Ore Run*

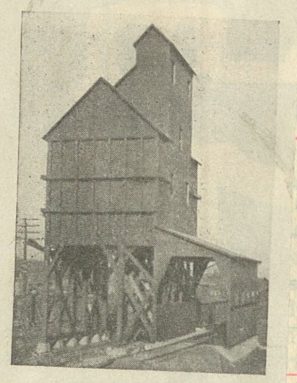
Chicago & North Western Double-Header Hauling Solid Train of Ore From Escanaba, Mich.

(Photo submitted by Brother E. C. Case, Div. 262)

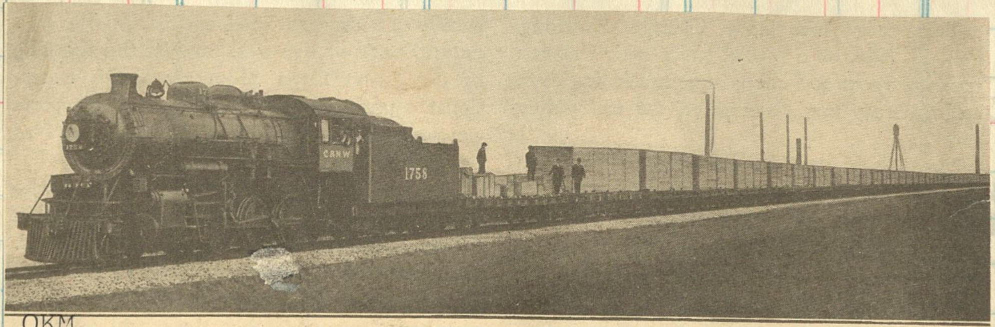
1700-1724
c/n 35224



Consolidation Type Locomotive, Class Z, Built by The Baldwin Locomotive Works, 1910



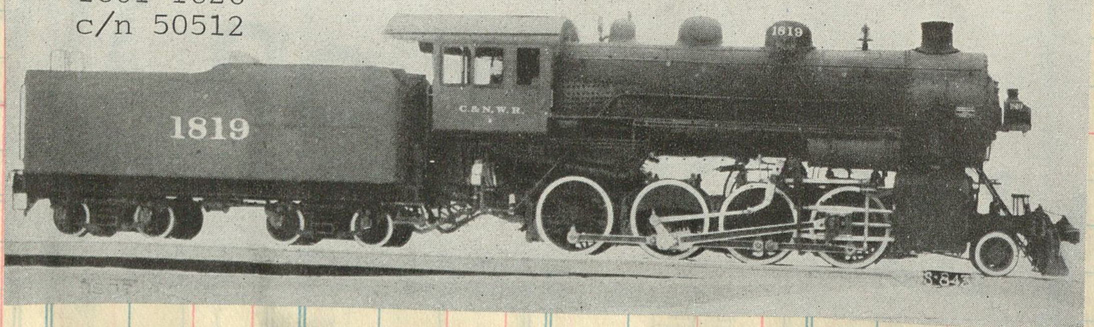
One of 18 on the C.&N.W.
Location: Clinton, Iowa

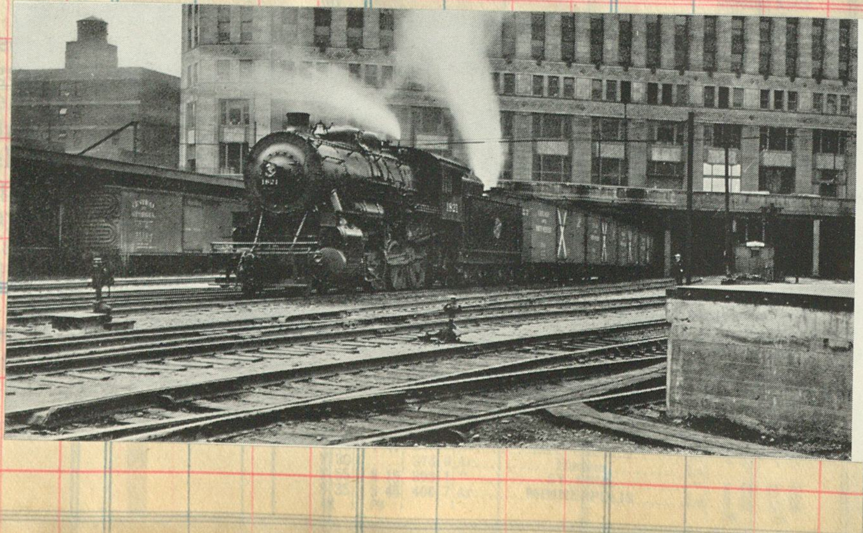


OKM

Special Train of Auto Trucks, Kenosha, Wis., to Chicago (1915)

Schenectady 1911
1801-1820
c/n 50512





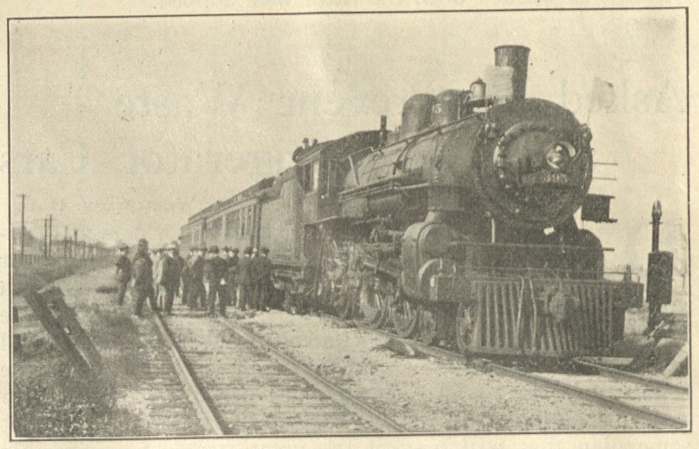
**A Load of L. C. L. Freight, Bound for Proviso Freight Transfer House, Leaving Wells Street Freight Station Under the Merchandise Mart**

The box cars used in this special service are distinguished by a large X placed on each door

Clos. No. Sold Amount Clos. No. Sold

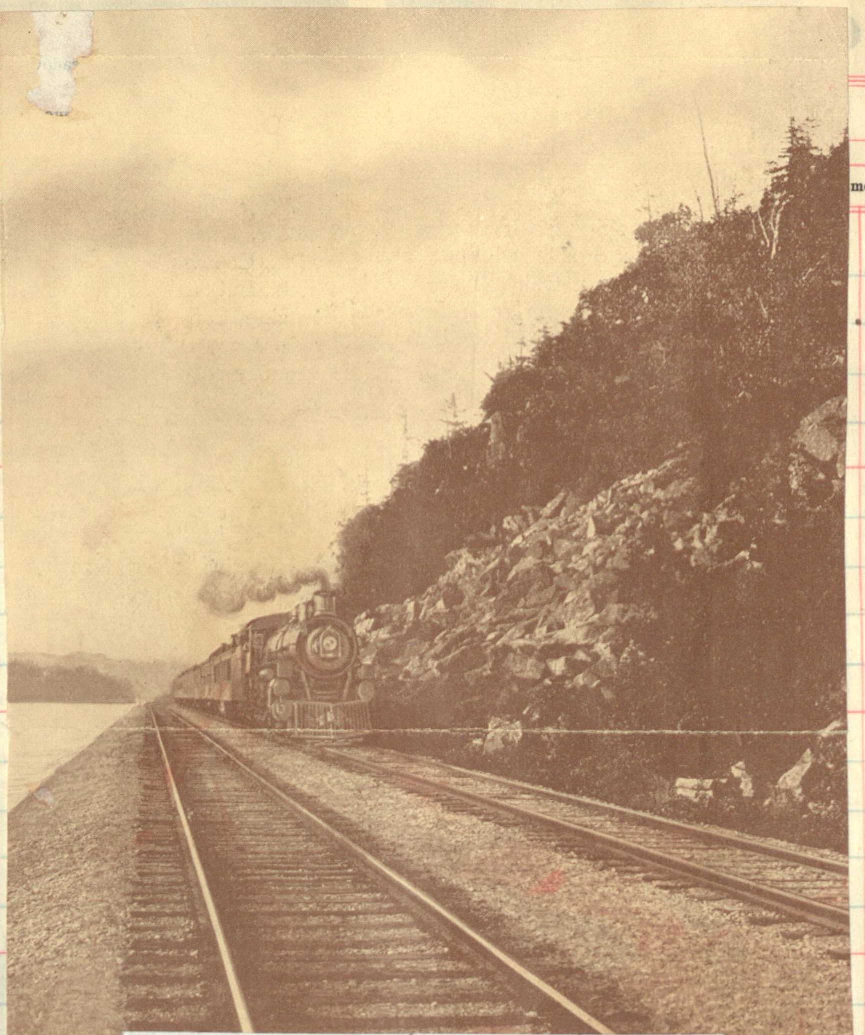
1923

The Chicago & North Western demonstrated the General Railway Signal Company's system of intermittent inductive tapered train control on October 13, between West Chicago, Ill. and Forris (Elgin). A special train consisting of an Atlantic type locomotive, a business car and a parlor observation car left Chicago at 9:00 a. m., the test being completed at 3:00 p. m. Fifteen railroads were represented by signal, mechanical and general officers, there being a total of 41 present.



Making Low Speed Tests Over Pair of Track Inductors

The territory on which this device is installed is not a portion of the line designated in the Interstate Commerce Commission's order and this installation was made primarily for test purposes. From West Chicago to Wayne, there is five miles of double track, the balance being single track. The double track is equipped with Model 2A, direct-current signals located on bridges and the single track is equipped with the absolute permissive block system, Model 2A, direct-current signals being mounted on the masts in the usual manner.

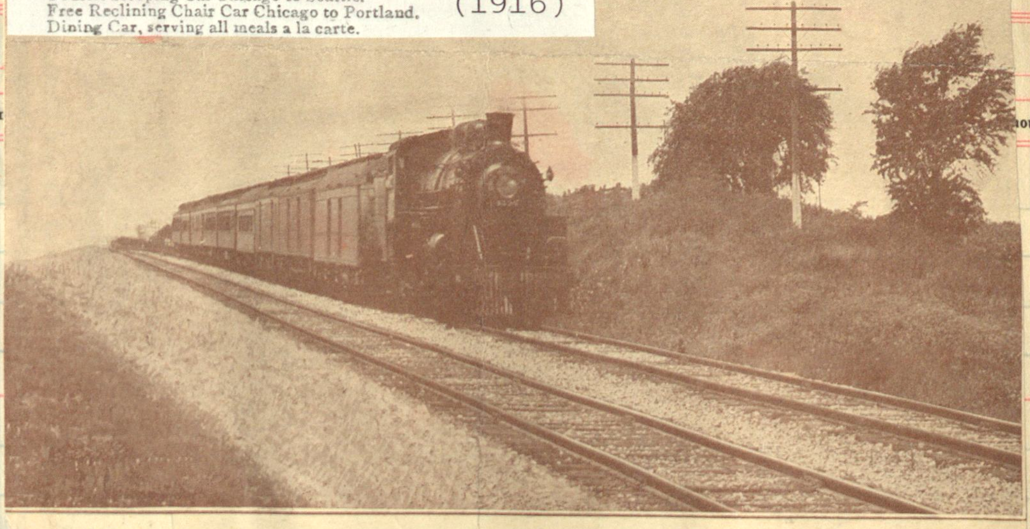


**No. 517—The Badger State Express. Daily.**
Observation Parlor Car Chicago to Minneapolis.
Free Reclining Chair Car Chicago to Minneapolis.
Dining Car Chicago to Minneapolis.
Drawing-room Sleeping Car Mankato to Redfield (from Minneapolis).
Drawing-room Sleeping Car Mankato to Huron (from Minneapolis).
Cafe Parlor Car Elroy to Mankato.
Coach and Smoker Elroy to Pierre.
(1916)

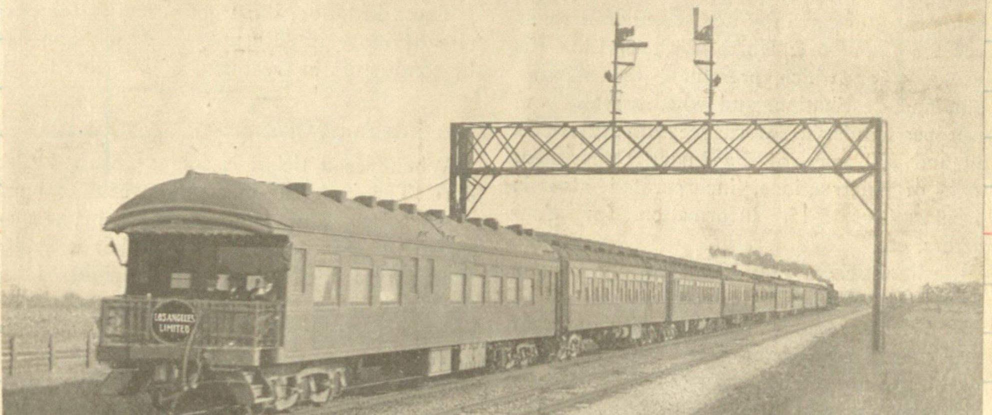
OKM

THE BADGER STATE EXPRESS

**No. 17—The Oregon-Washington Limited. Daily.**
Observation-Buffet-Library Car Chicago to Portland.
12-Section Drawing-room Compartment Sleeping Car Chicago to Seattle.
Drawing-room Sleeping Car Chicago to Omaha.
Drawing-room Sleeping Car Chicago to Des Moines.
Tourist Sleeping Car Chicago to Seattle.
Free Reclining Chair Car Chicago to Portland.
Dining Car, serving all meals a la carte.
(1916)



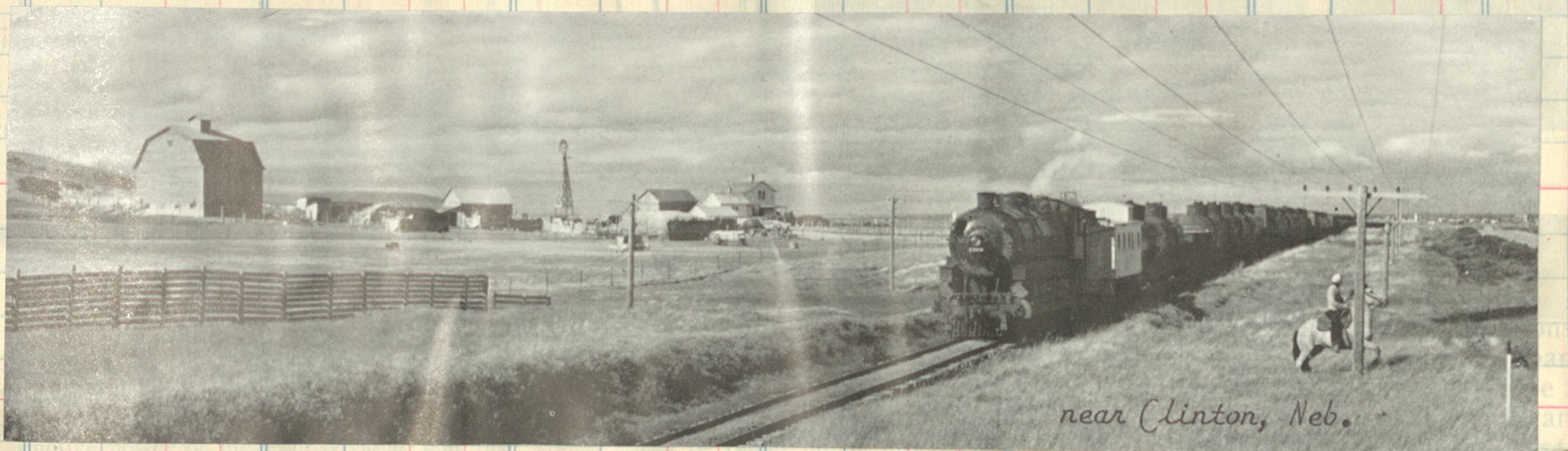
OKM THE OREGON-WASHINGTON LIMITED (1914)



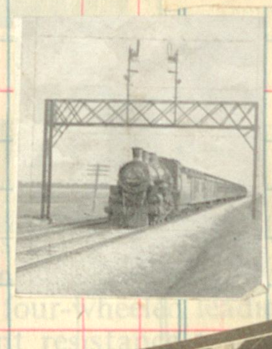
**No. 7—The Los Angeles Limited. Daily.**
Observation-Buffet-Library Car, with barber, Chicago to Los Angeles.
Drawing-room Compartment Sleeping Car Chicago to Los Angeles.
Drawing-room Compartment Sleeping Car Chicago to Pasadena.
D.-R. Compartment Sleeping Car Minneapolis to Los Angeles.
Tourist Sleeping Car Chicago to Los Angeles.
Free Reclining Chair Car Chicago to Omaha.
Dining Car, serving all meals a la carte.
(1916)

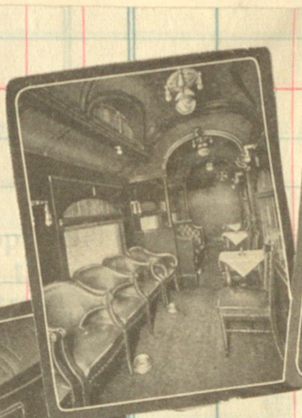
OKM

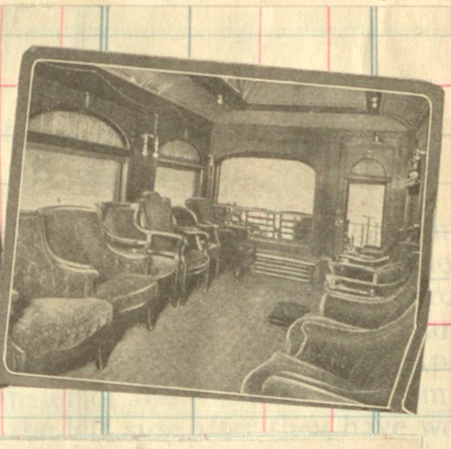
The Los Angeles Limited
Speeding westward across picturesque Illinois and Iowa (1915)

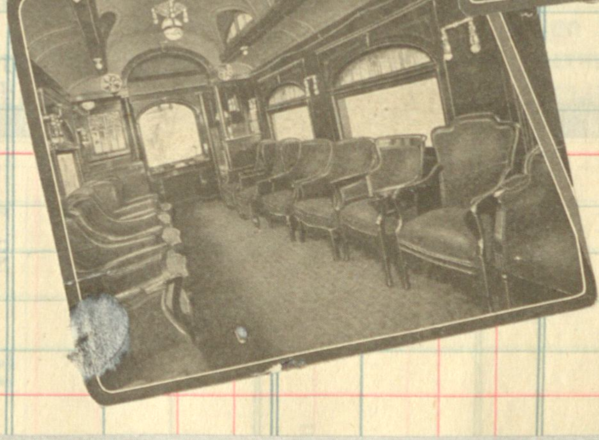


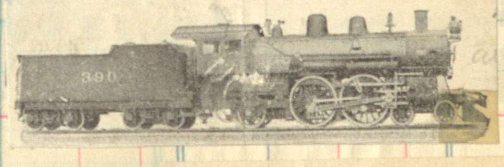
near Clinton, Neb.

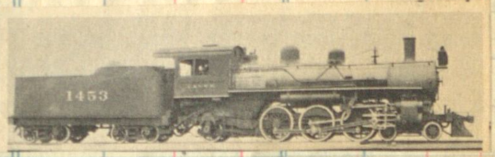


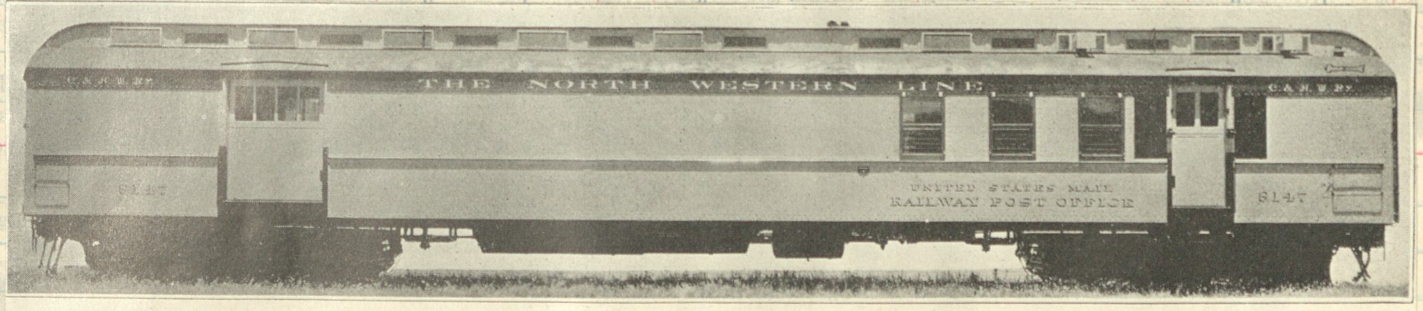




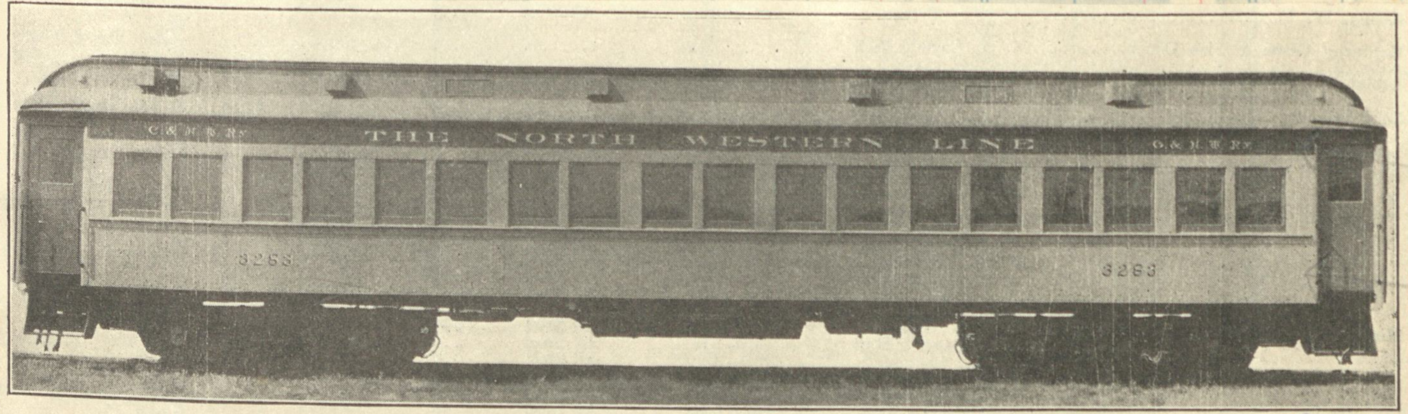




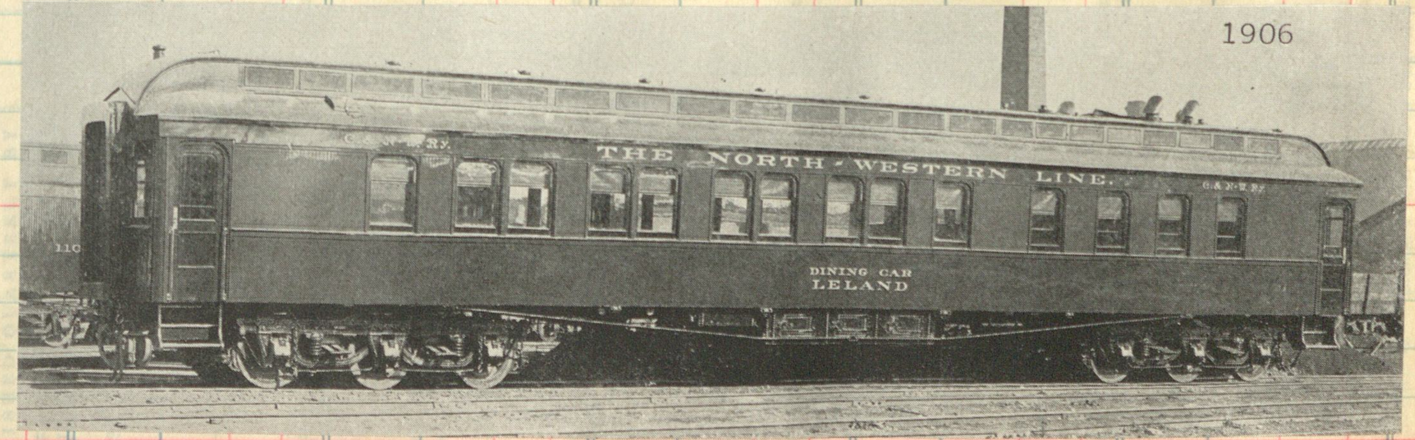




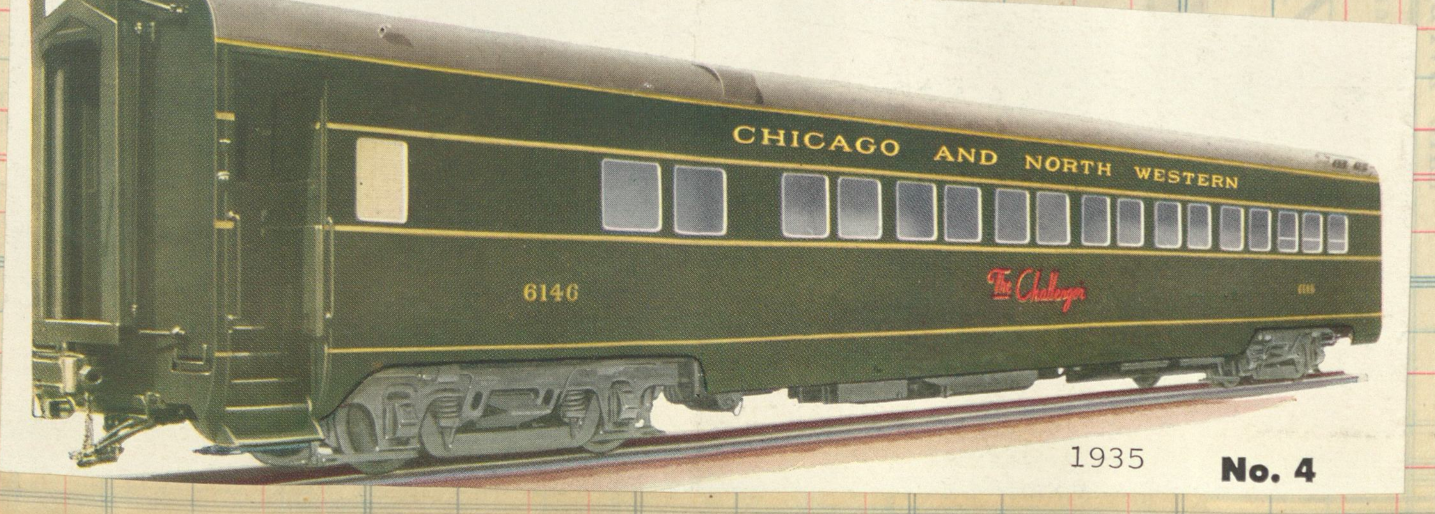
54-Ft. Combination Baggage and Mail Car Built by American Car & Foundry Co. 1925



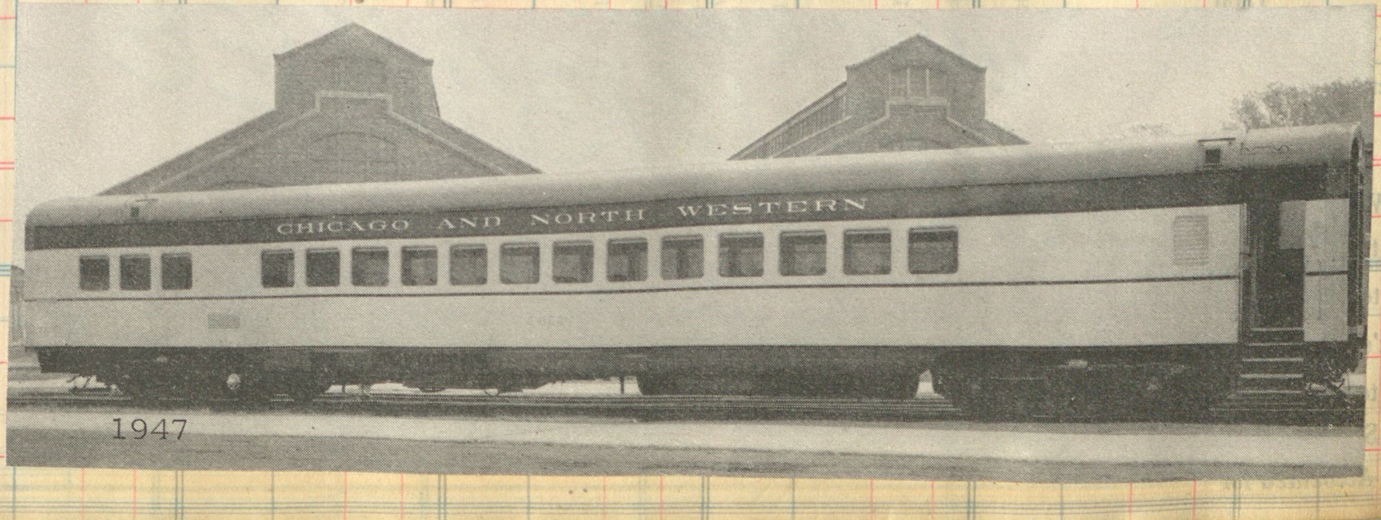
Built for the Chicago & North Western by the American Car & Foundry Company 1925 Std



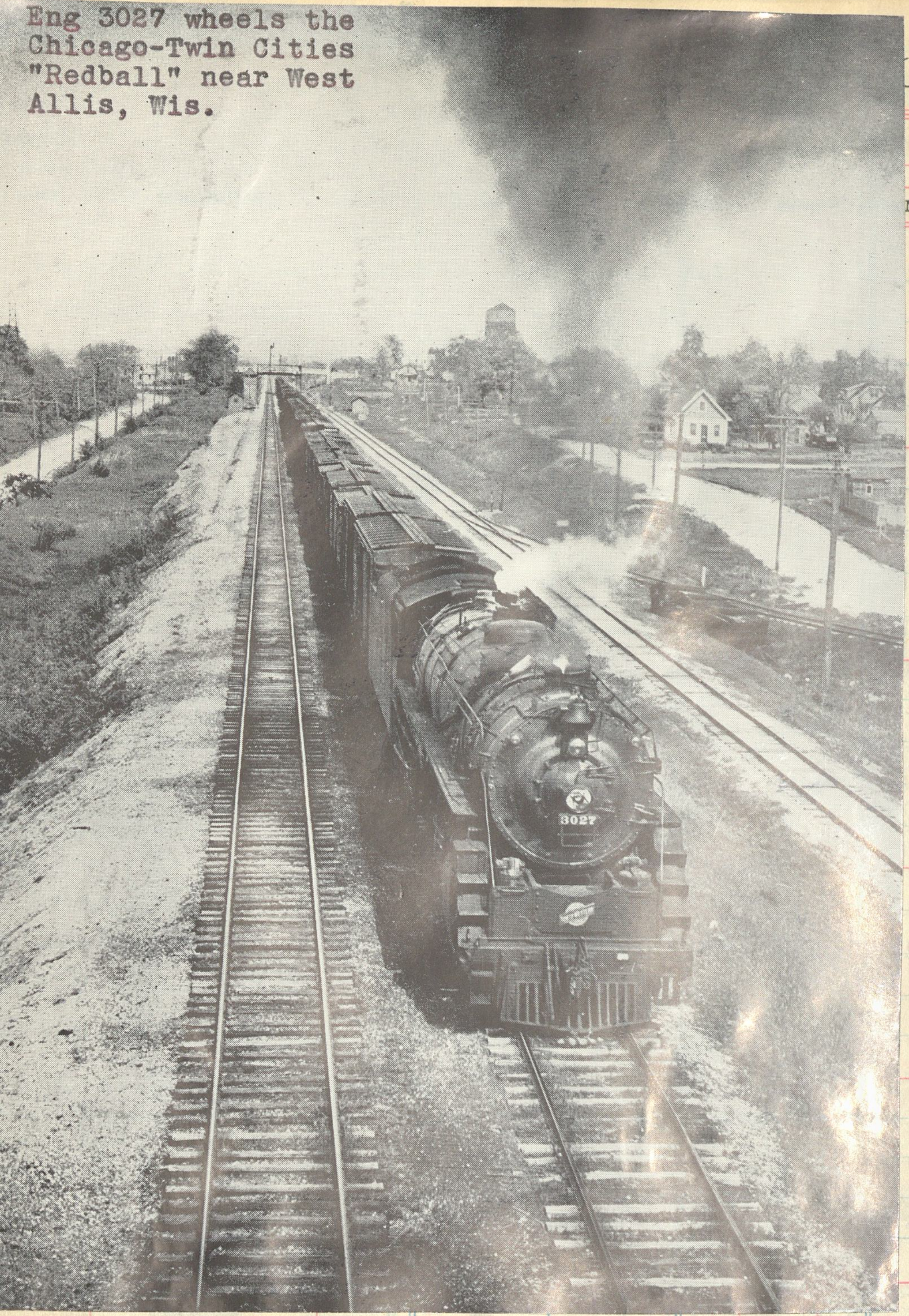
1906

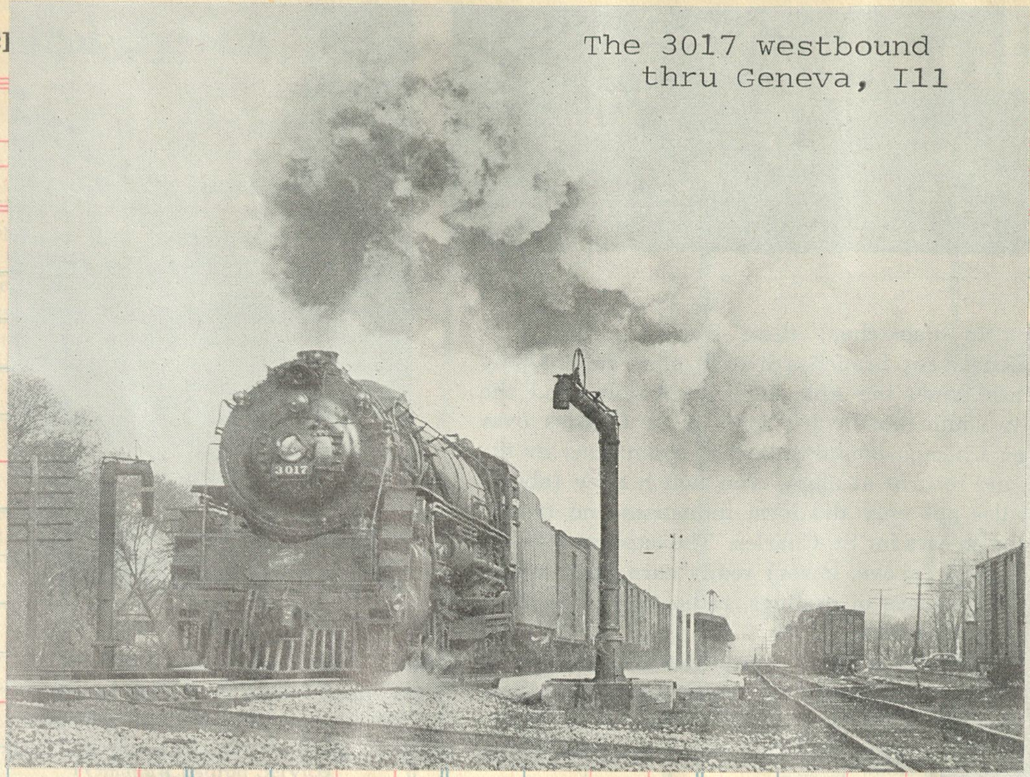


1935 **No. 4**



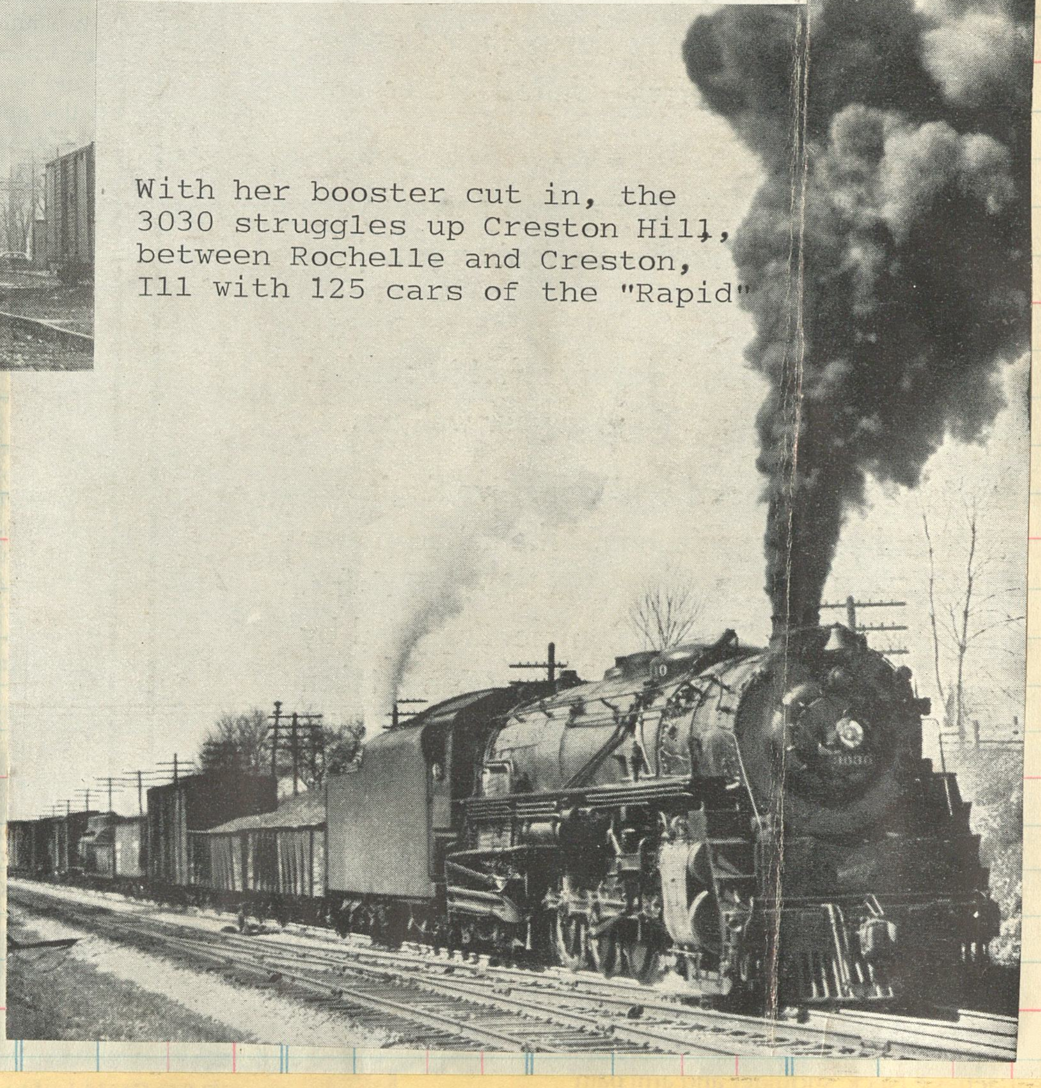
1947

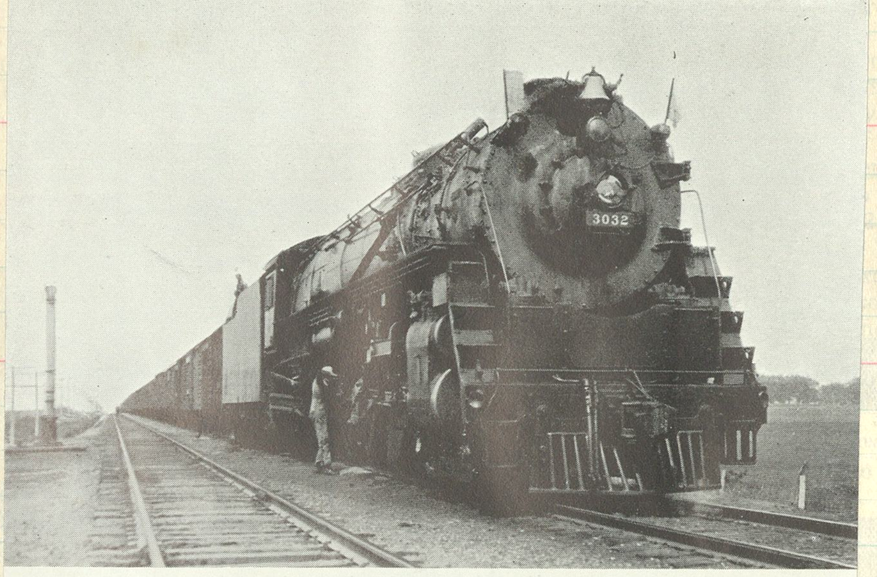

Eng 3027 wheels the Chicago-Twin Cities "Redball" near West Allis, Wis.


The 3017 westbound thru Geneva, Ill

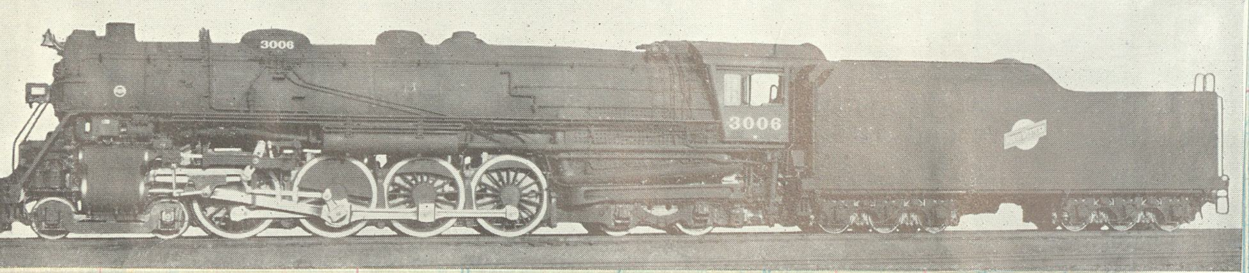
CHICAGO NORTH WESTERN LINE A Symbol of

FAST FREIGHT SERVICE
EXPERT FREIGHT HANDLING
ON-TIME DELIVERIES
QUICK RECONSIGNMENTS

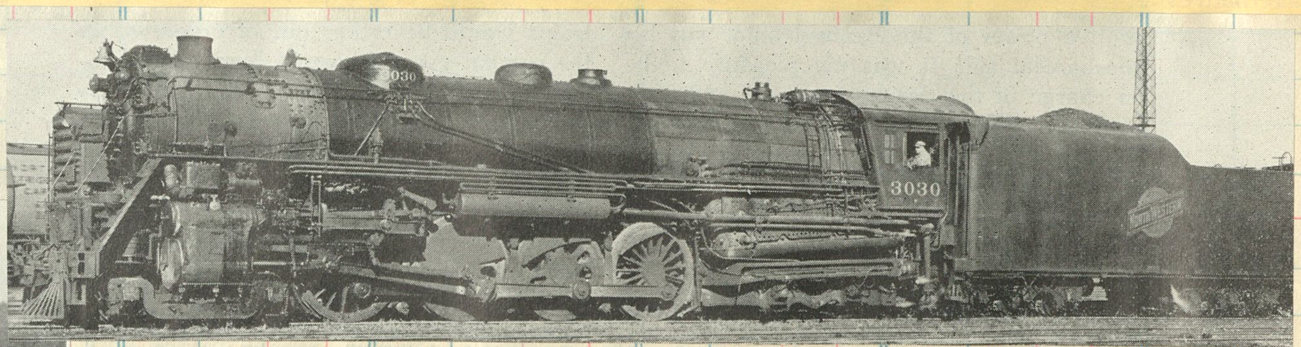

With her booster cut in, the 3030 struggles up Creston Hill, between Rochelle and Creston, Ill with 125 cars of the "Rapid"

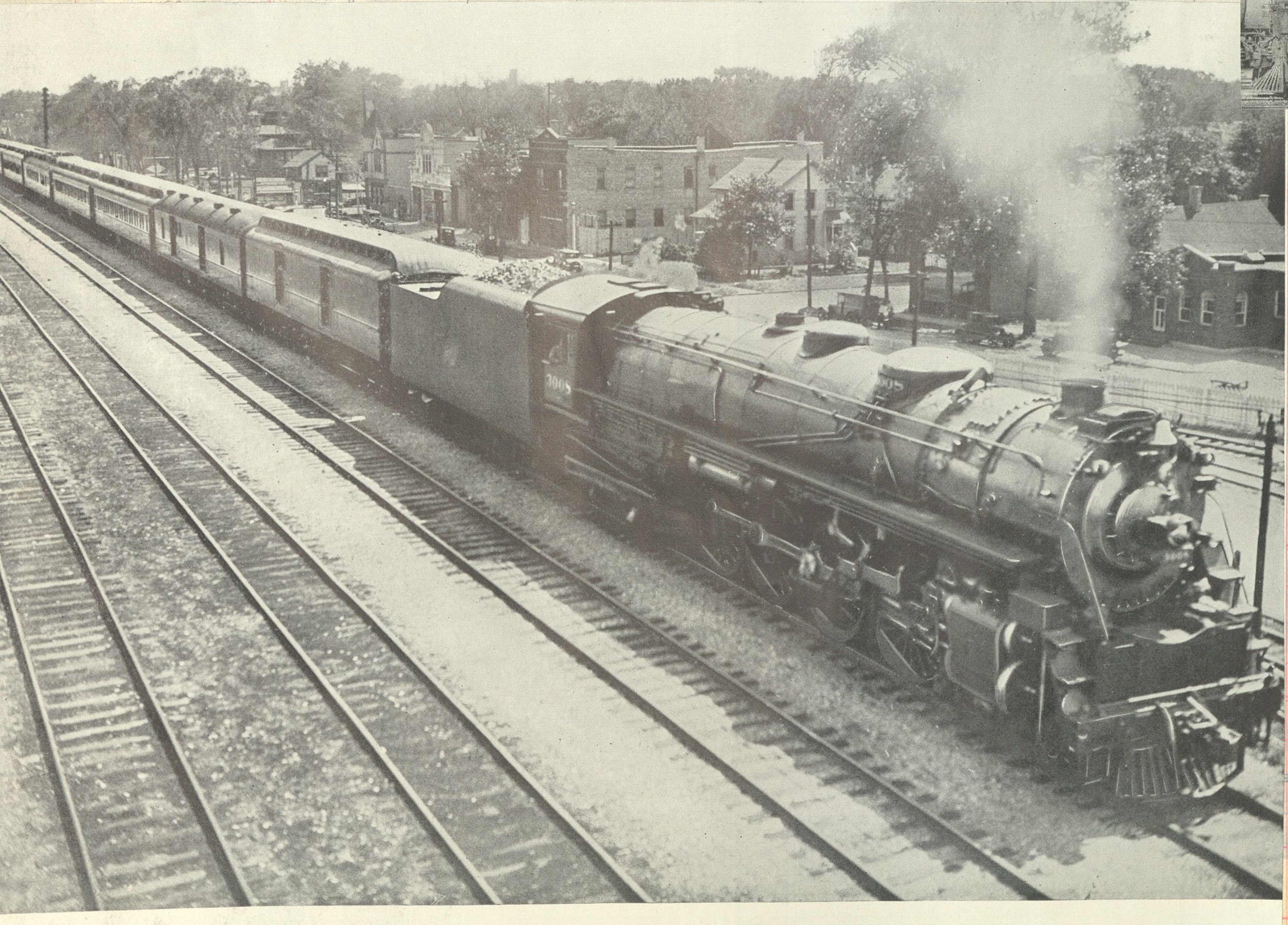

The *Calumet* Stopping at Malta

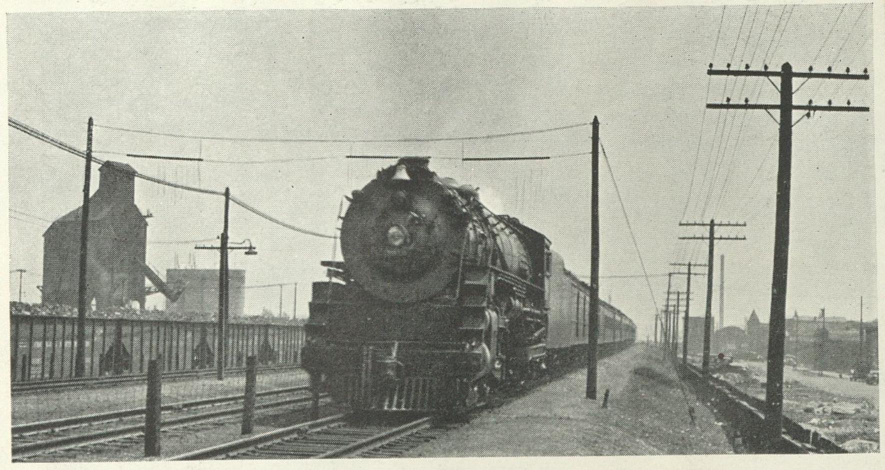
To handle the heavy Chicago-Omaha traffic the NorthWestern took delivery of 35 dual service 4-8-4's in 1929. They were not all that attractive due to the brutish design favored by Baldwin. With 76" drivers the booster came in handy in starting heavy trains. Noed 3001-3035, all were rebuilt except 3001-2-3 & 12 during 1946-49.



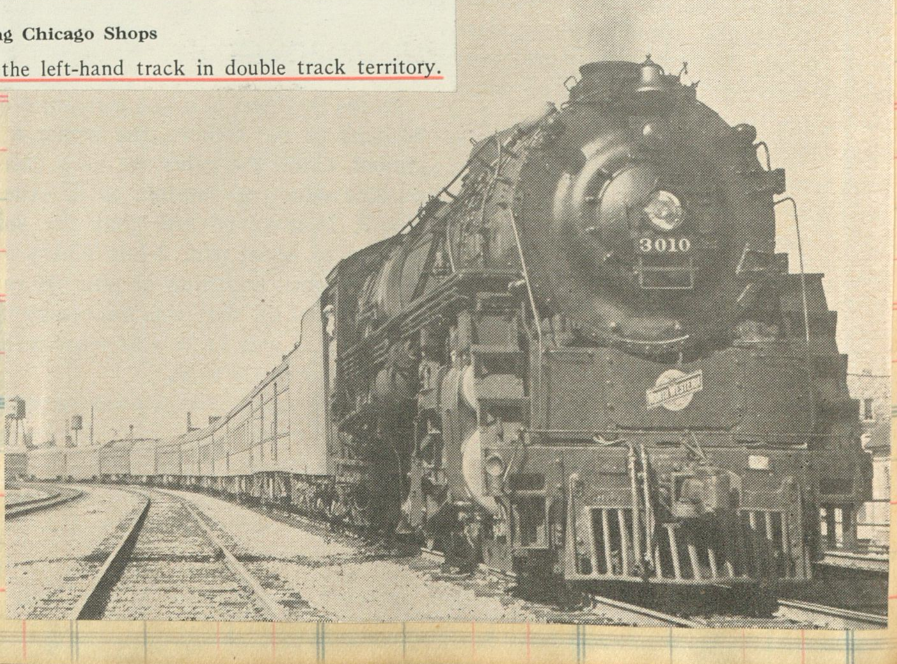
| | |
|---|---|
| Cylinders | 27″ x 32″ |
| Steam pressure | 250 lb. |
| Heating surface | 5214 sq. ft. |
| Superheating surface | 2357 sq. ft. |
| Grate area | 100 sq. ft. |
| Drivers, diam. | 76″ |
| Weight on drivers | 288,000 lb. |
| Weight, total engine | 498,000 lb. |
| Tractive force, engine | 65,200 lb. |
| Tractive force, booster | 11,300 lb. |




Chicago and North Western Train Number 13, *The Columbine*, Hauled by a Class H (4-8-4 Type) Locomotive


Train 13 Passing Chicago Shops

Chicago and North Western trains run on the left-hand track in double track territory.



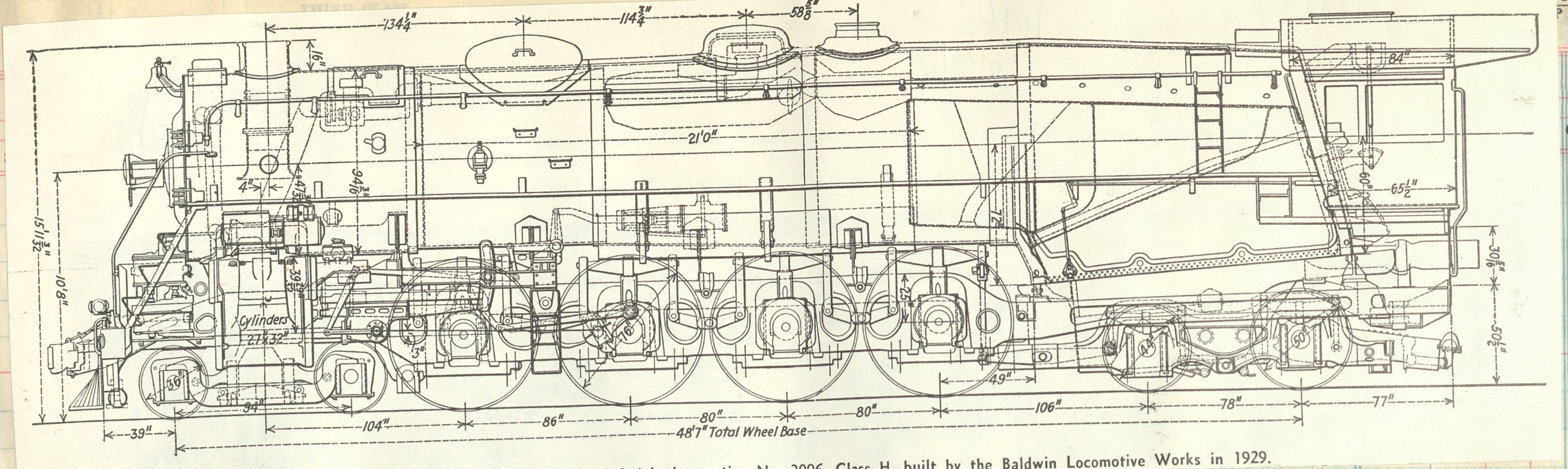
YCS 3-45 1000 bks. (Eureka 461)

P A-46

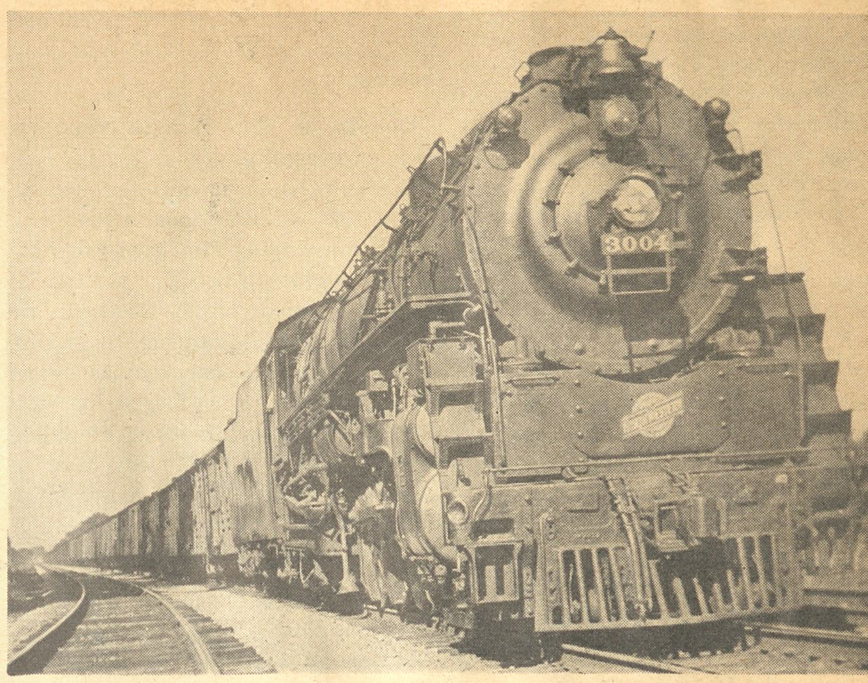
HERE
Make
Sheet

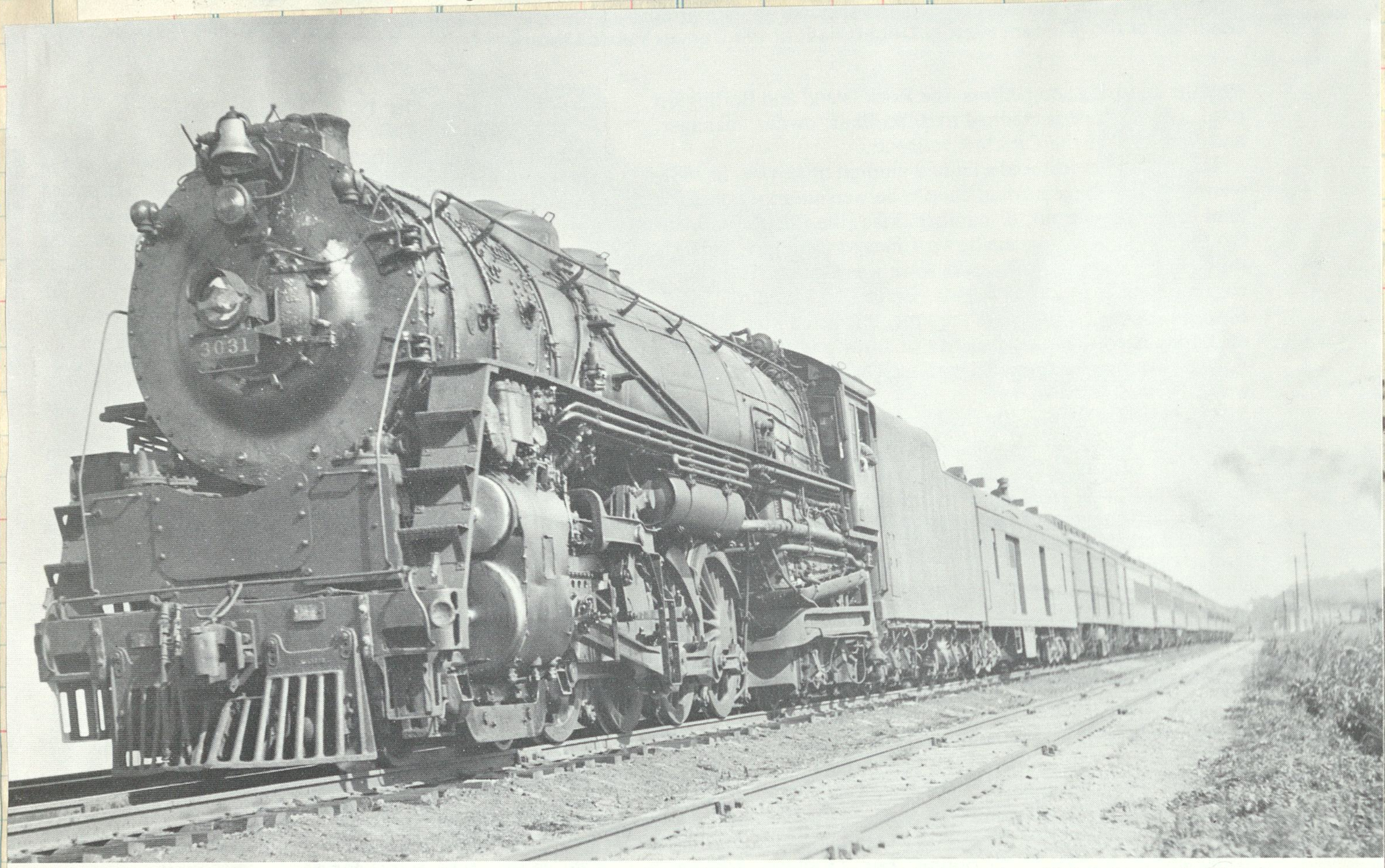
Clos. No.

Clos. No.

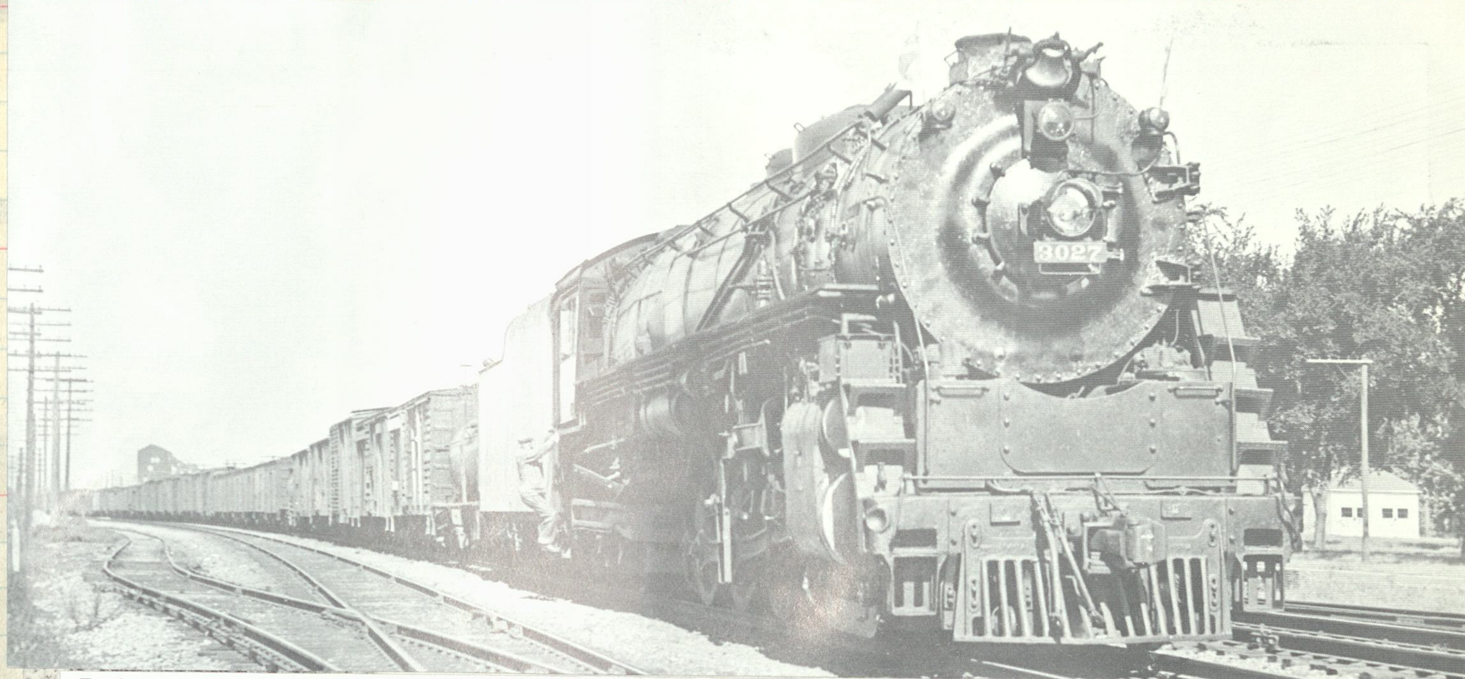


Chicago & North Western passenger and freight locomotive No. 3006, Class H, built by the Baldwin Locomotive Works in 1929.

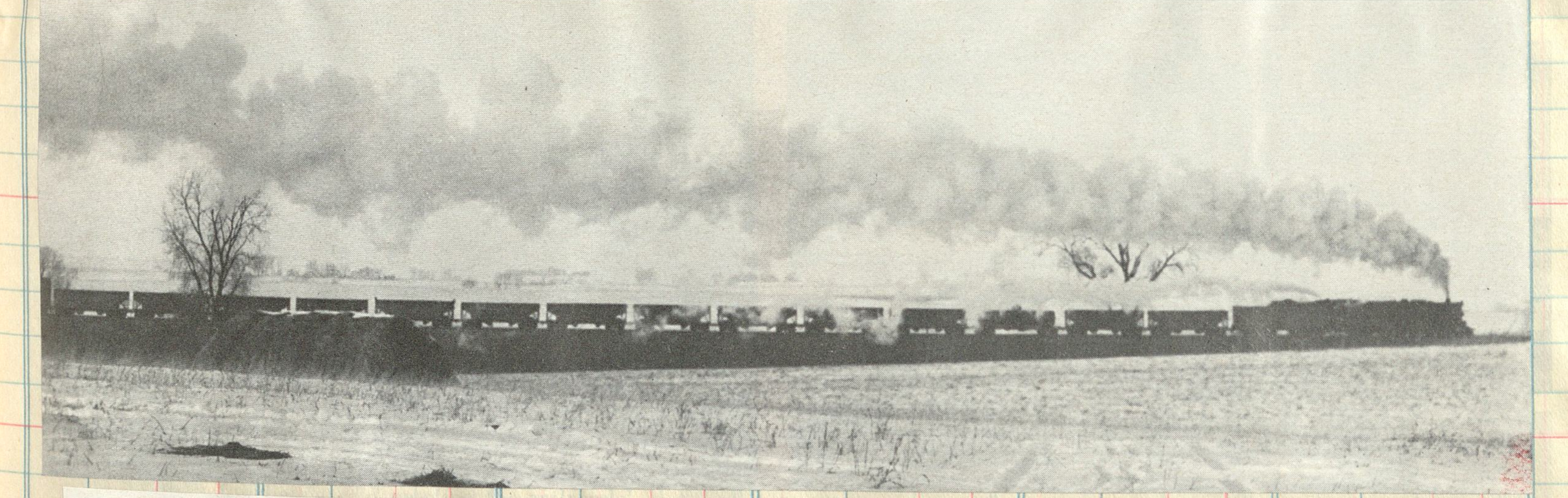




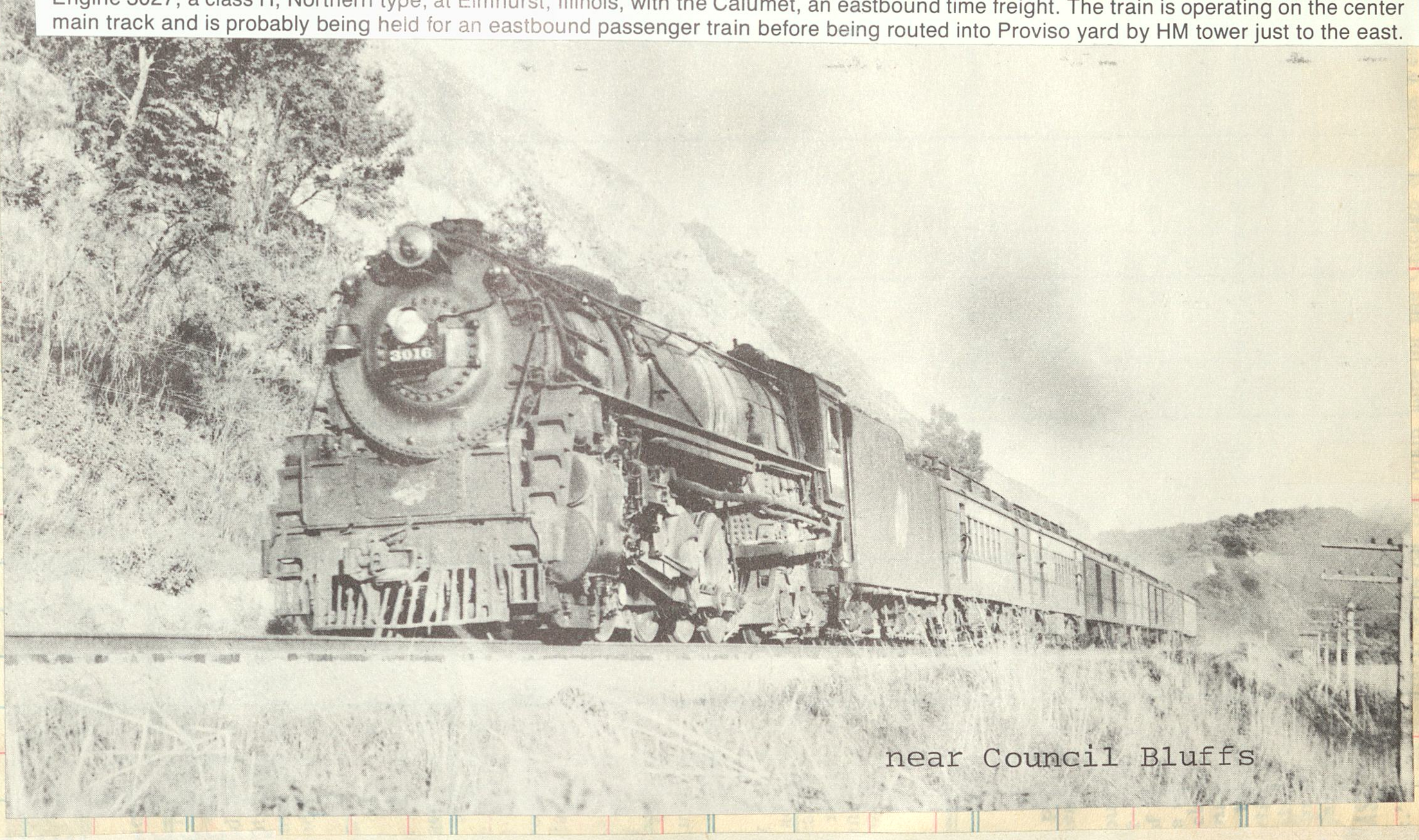
Train number 17, the *Portland Rose* has departed Missouri Valley with 12 cars behind engine 3031, a class H, 4-8-4 type, destined for Council Bluffs and Portland, Oregon via the Union Pacific. The date is August 28, 1933 and all heavy freight and passenger traffic on the Iowa Division is in the capable hands of the class H engines. Photo by Otto C. Perry, courtesy of the Western History Department, Denver Public Library.



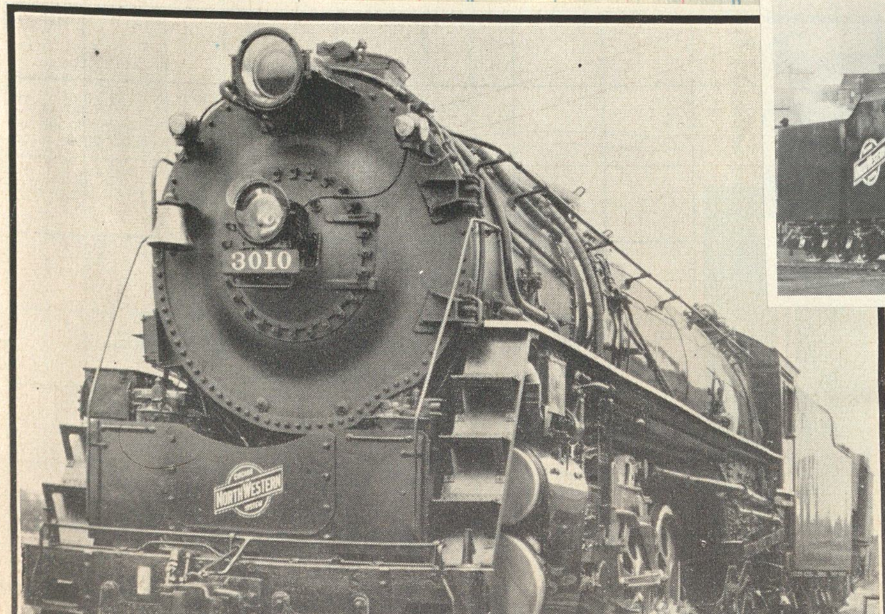
Engine 3027, a class H, Northern type, at Elmhurst, Illinois, with the Calumet, an eastbound time freight. The train is operating on the center main track and is probably being held for an eastbound passenger train before being routed into Proviso yard by HM tower just to the east.



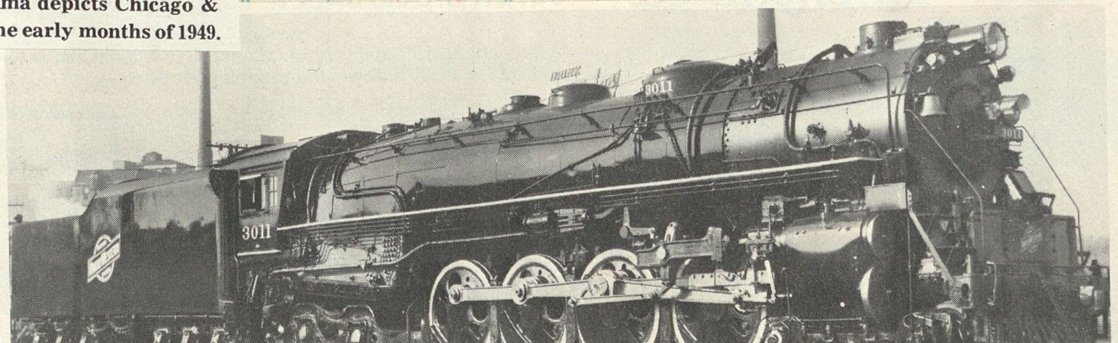
**PRAIRIE WINTER:** The road could be one of several, but this frigid panorama depicts Chicago & North Western H-1 4-8-4 No. 3014 highballing eastbound near De Kalb, Ill., in the early months of 1949.

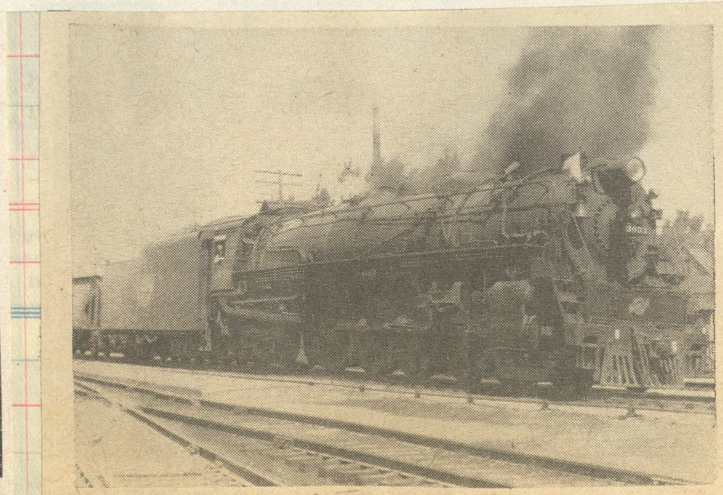


near Council Bluffs

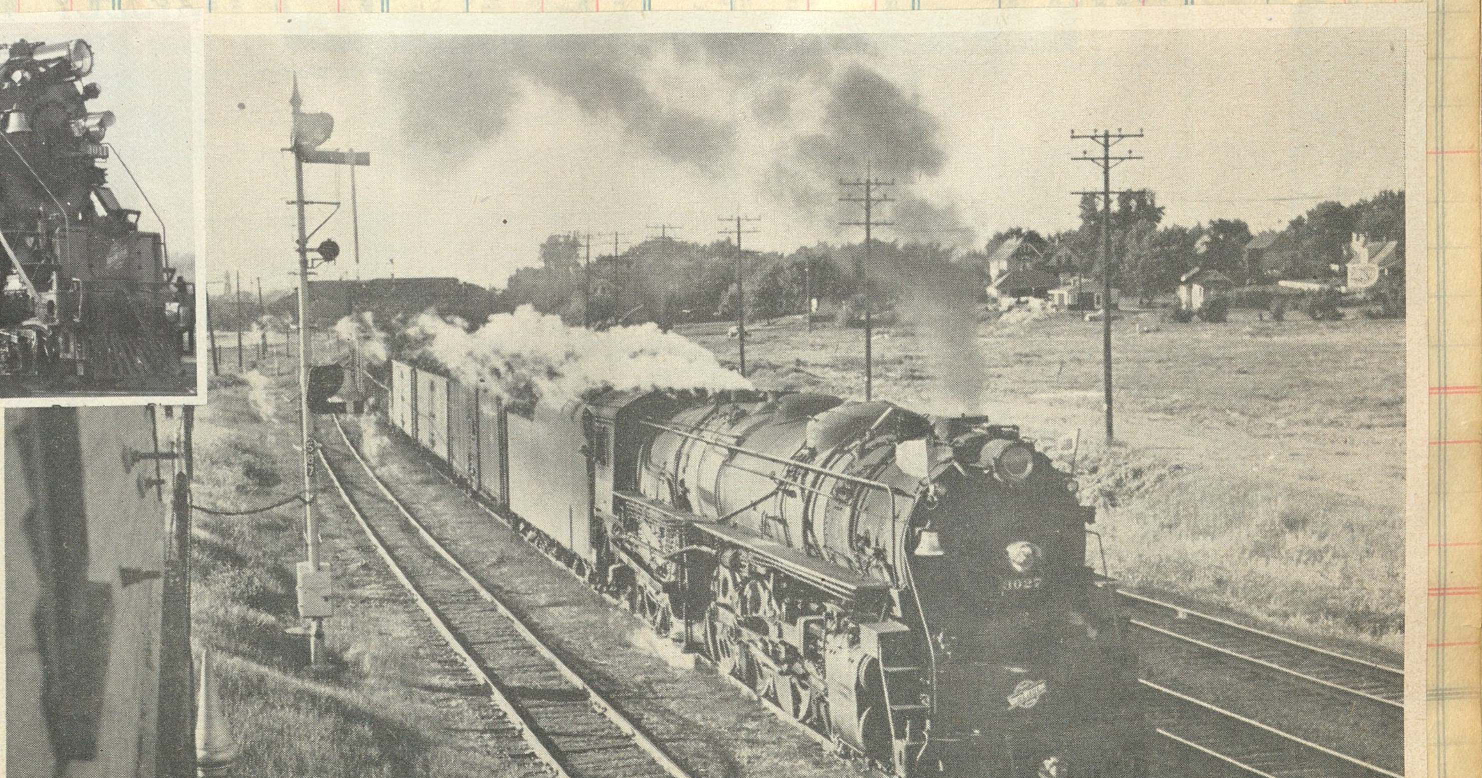


North Western Modernized 4-8-4 No. 3010



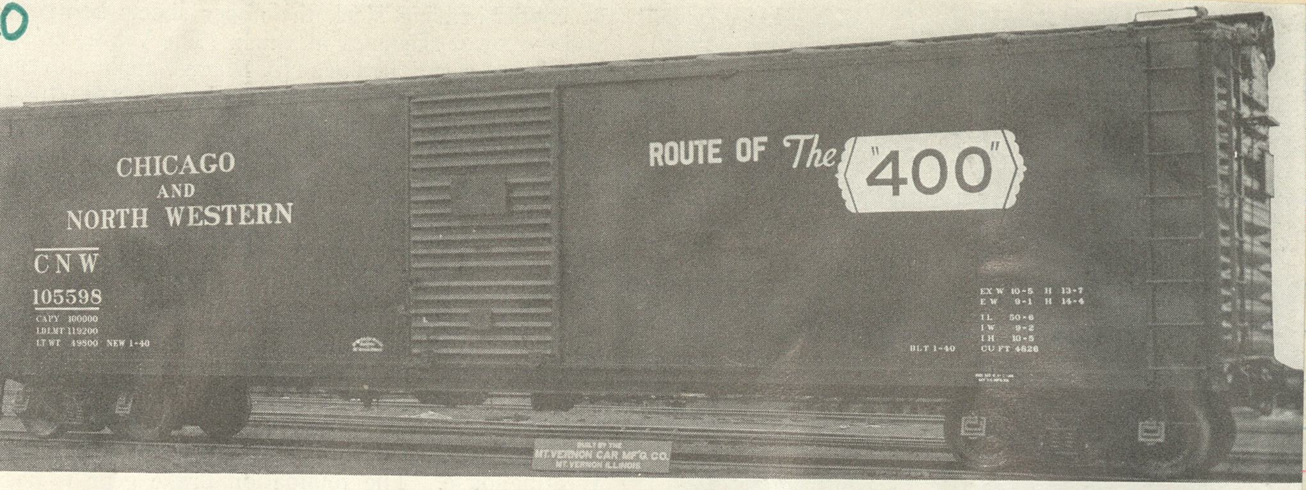


CHICAGO & NORTH WESTERN'S ENGINE 3033 AT AMES, IOWA



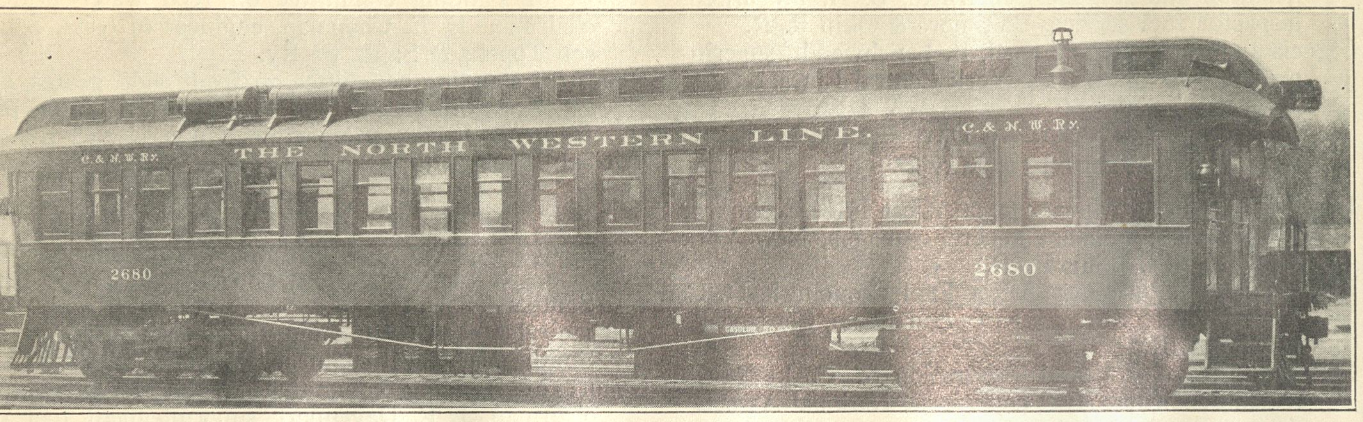
↓Chicago & North Western Advance 380, a Milwaukee-Chicago freight, drifts up to St. Francis Tower at the junction of the main line with the round-Milwaukee belt, waiting for another train to clear the interlocking plant. Advance 380's engine is a class H-1 4-8-4, No. 3027.

Trains & Travel: William A. Wight.


CHICAGO
AND
NORTH WESTERN
CNW
105598
ROUTE OF The "400"
MT. VERNON CAR MFG. CO.

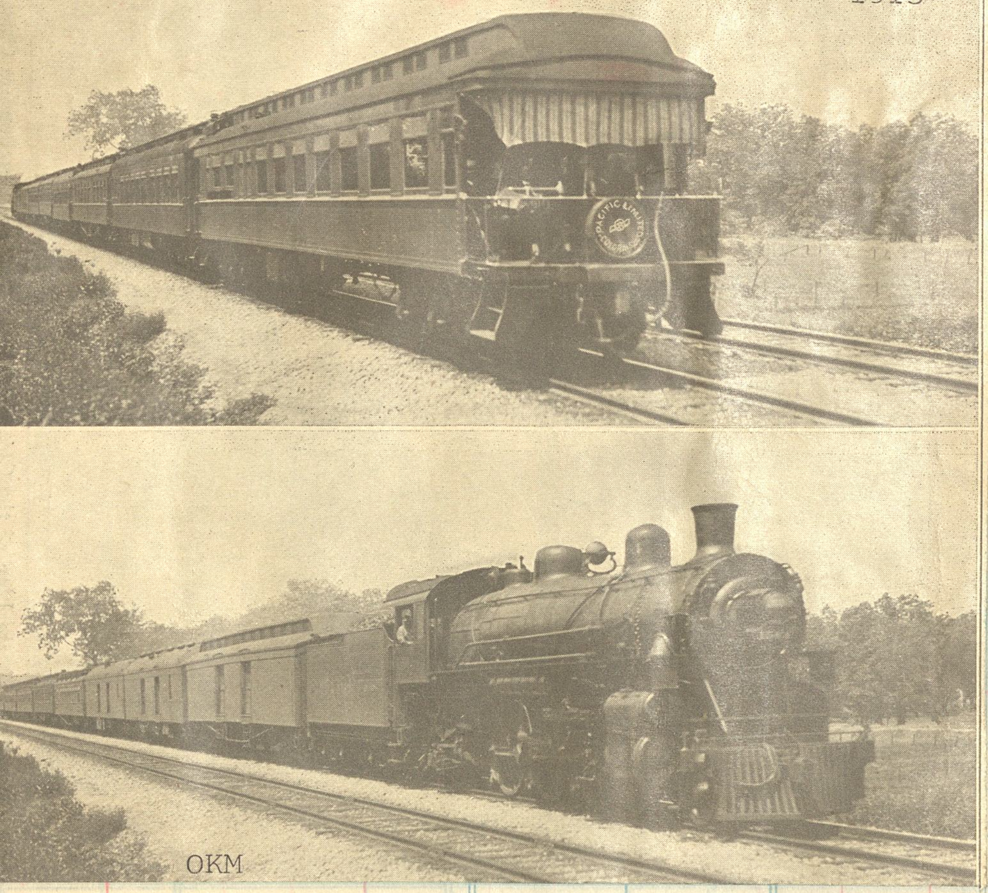
go & North Western 50-Ton Box Cars Built by Mt. Vernon 1940

2 **RAILWAY REVIEW** April 25, 1925

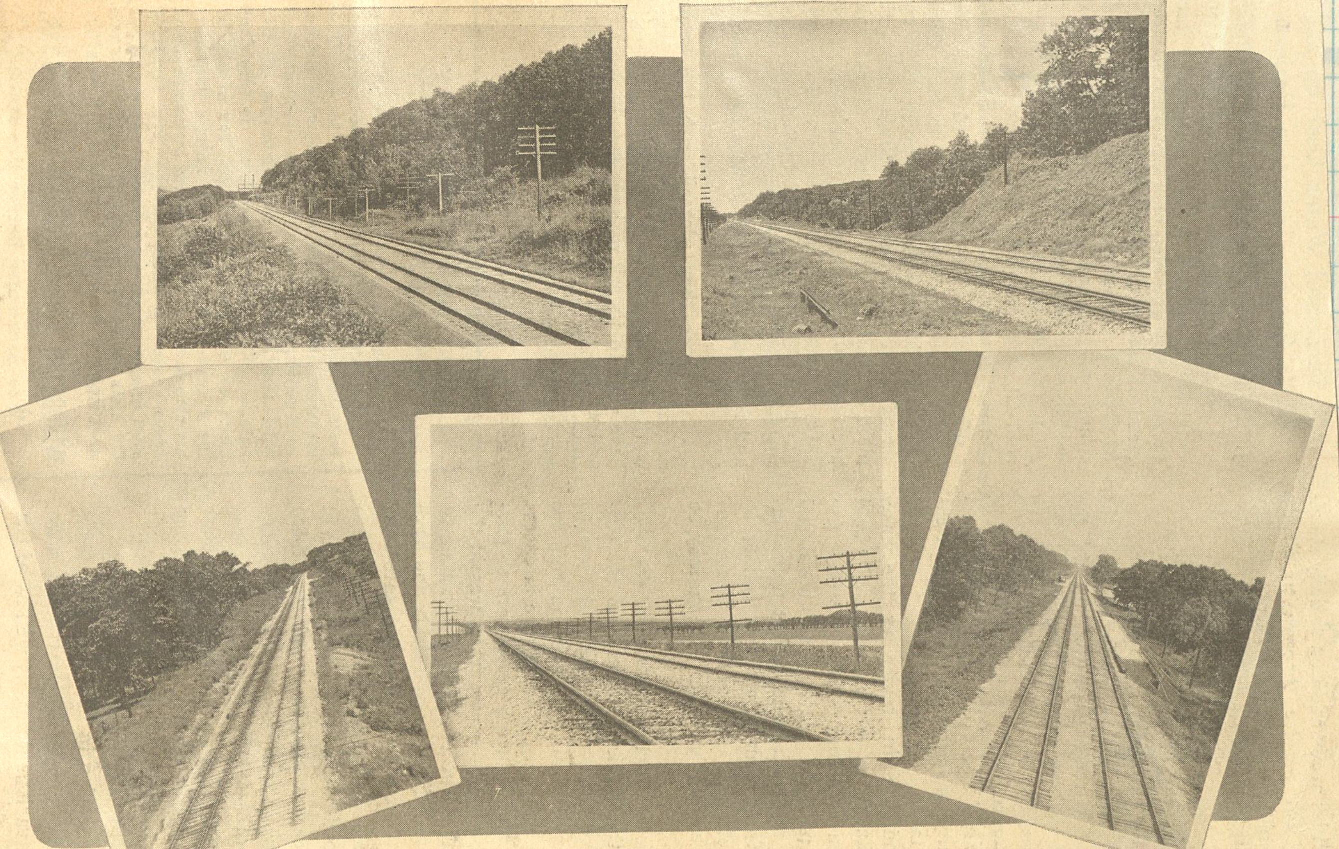

C. & N. W. RY.
THE NORTH WESTERN LINE.
C. & N. W. RY.
2680
2980

**The Chicago & Northwestern Passenger Coach Converted into a Gasoline Motor Car by the Application of Two Oneida Power Units.**

The Pacific Limited 1915



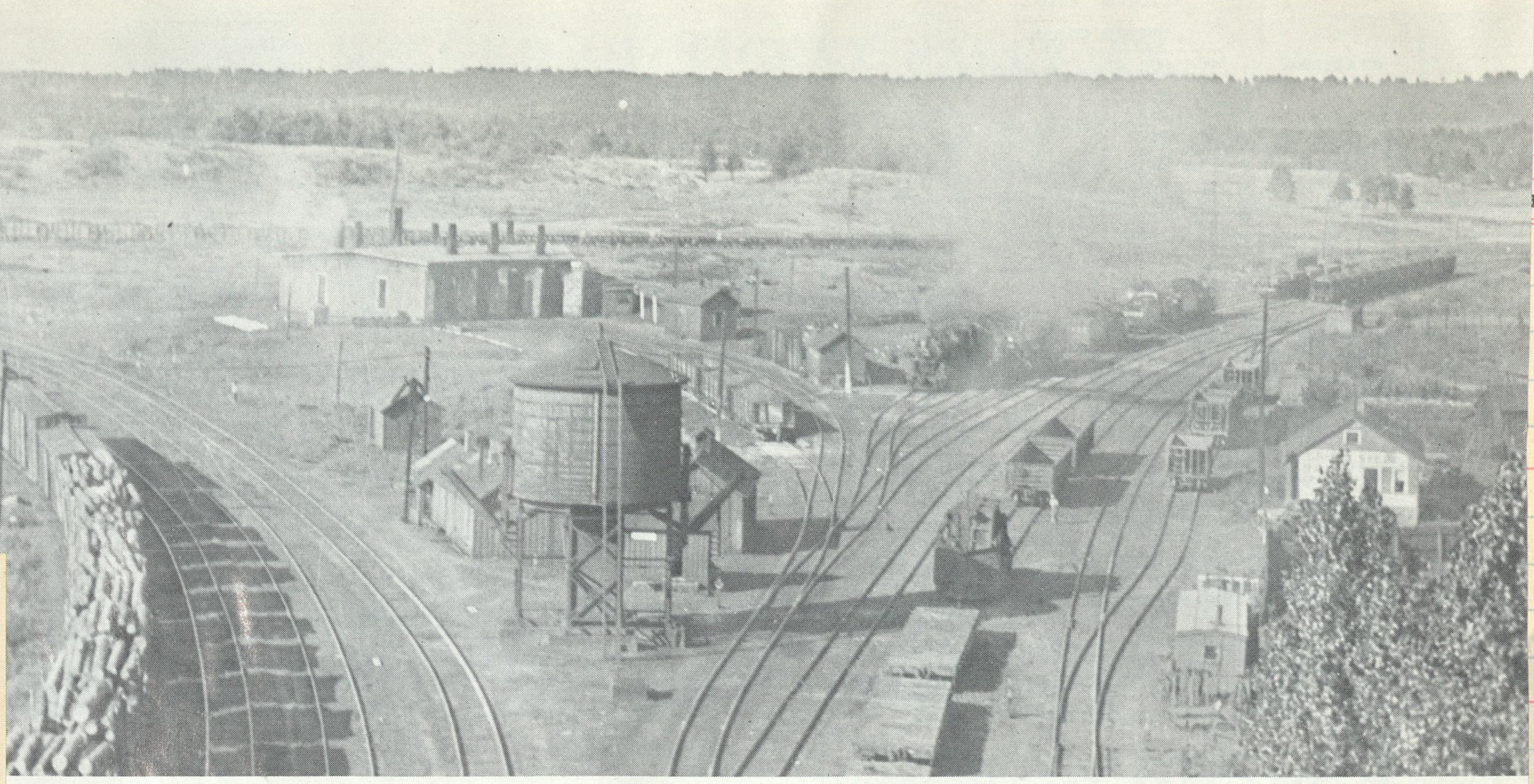
OKM



TYPICAL DOUBLE TRACK SCENES

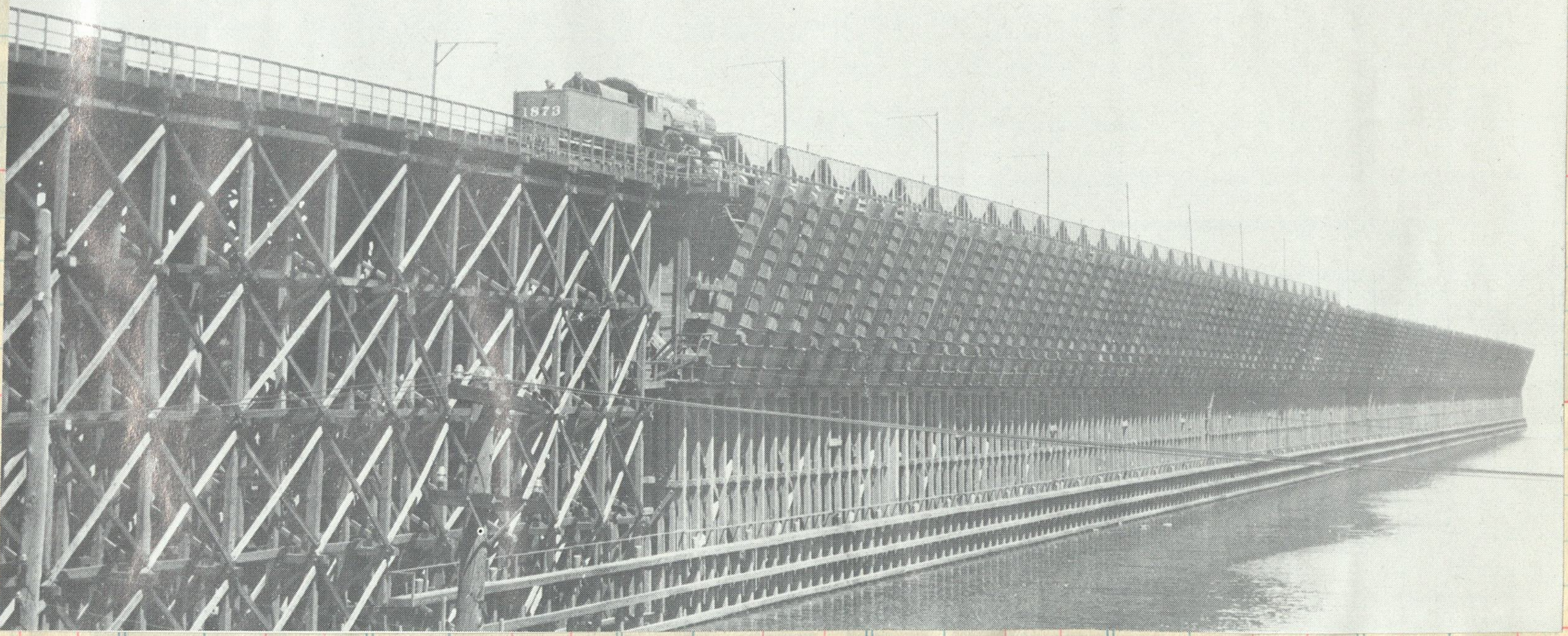
The heavily rock ballasted road bed, extra heavy steel rails and automatic electric safety signals are some of the many features that are included in "THE BEST OF EVERYTHING" furnished its patrons by the Chicago & North Western Ry. 1915

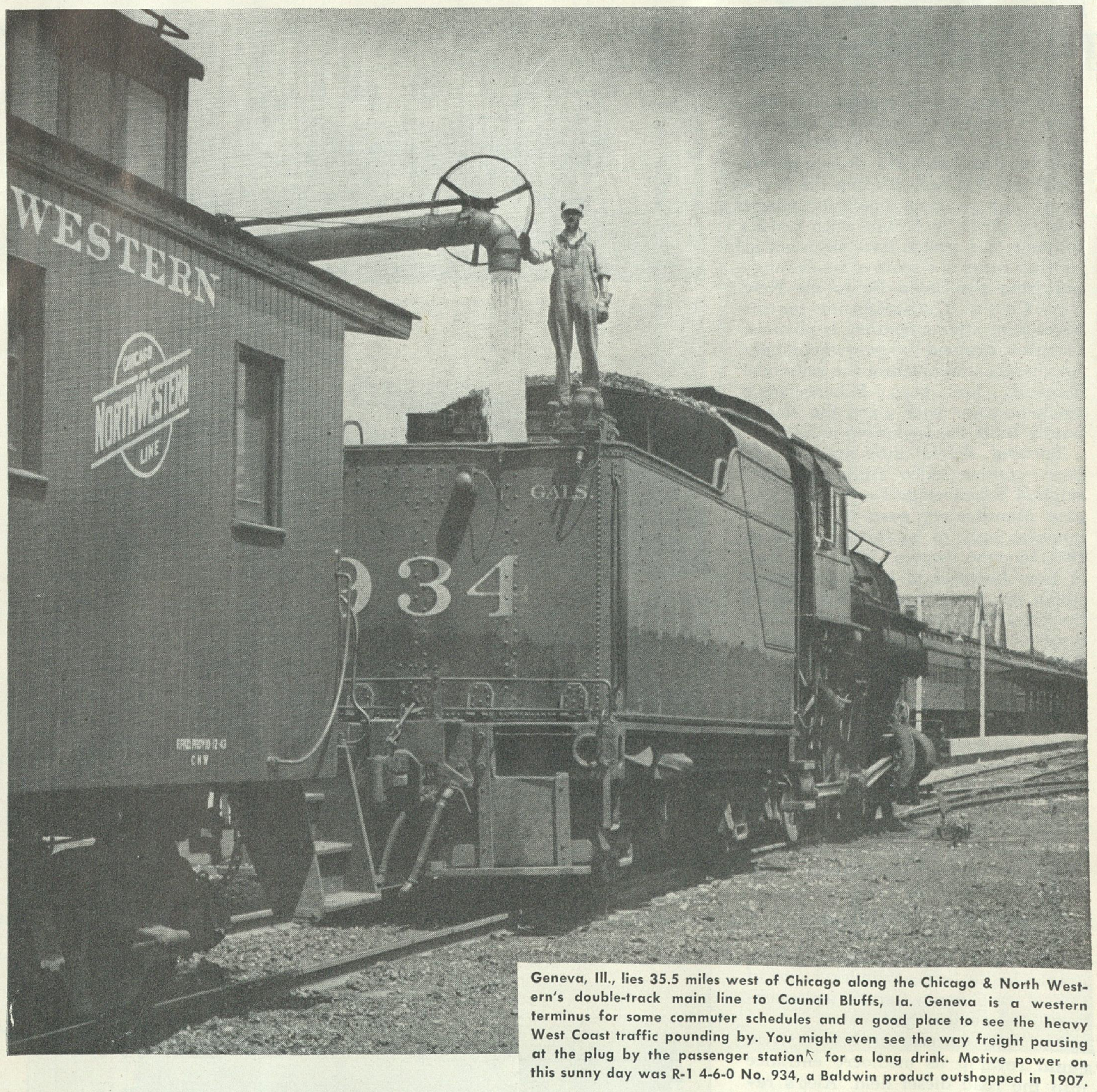
OKM



This view faces north and shows the wye and the engine terminal at Antoine, Michigan. The line to the right is the Ore Line Subdivision and runs east to Escanaba, Michigan. To the left, the line runs northwest to Watersmeet, Michigan and ultimately Ashland, Wisconsin. The tracks in the lower foreground join and a line runs southeast to Powers, Michigan. Of special interest is the double-spouted water tank and the four stall engine house which incidentally does not have a turn-table. Photo by Edward Selinsky on September 7, 1935.

The ore dock at Escanaba




WESTERN
CHICAGO NORTH WESTERN LINE
GALS.
934
CNW

Geneva, Ill., lies 35.5 miles west of Chicago along the Chicago & North Western's double-track main line to Council Bluffs, Ia. Geneva is a western terminus for some commuter schedules and a good place to see the heavy West Coast traffic pounding by. You might even see the way freight pausing at the plug by the passenger station↖ for a long drink. Motive power on this sunny day was R-1 4-6-0 No. 934, a Baldwin product outshopped in 1907.

Amount

Clos. No. Sold Amount Clos. No. Sold Amount

Clos. No. Sold Amount

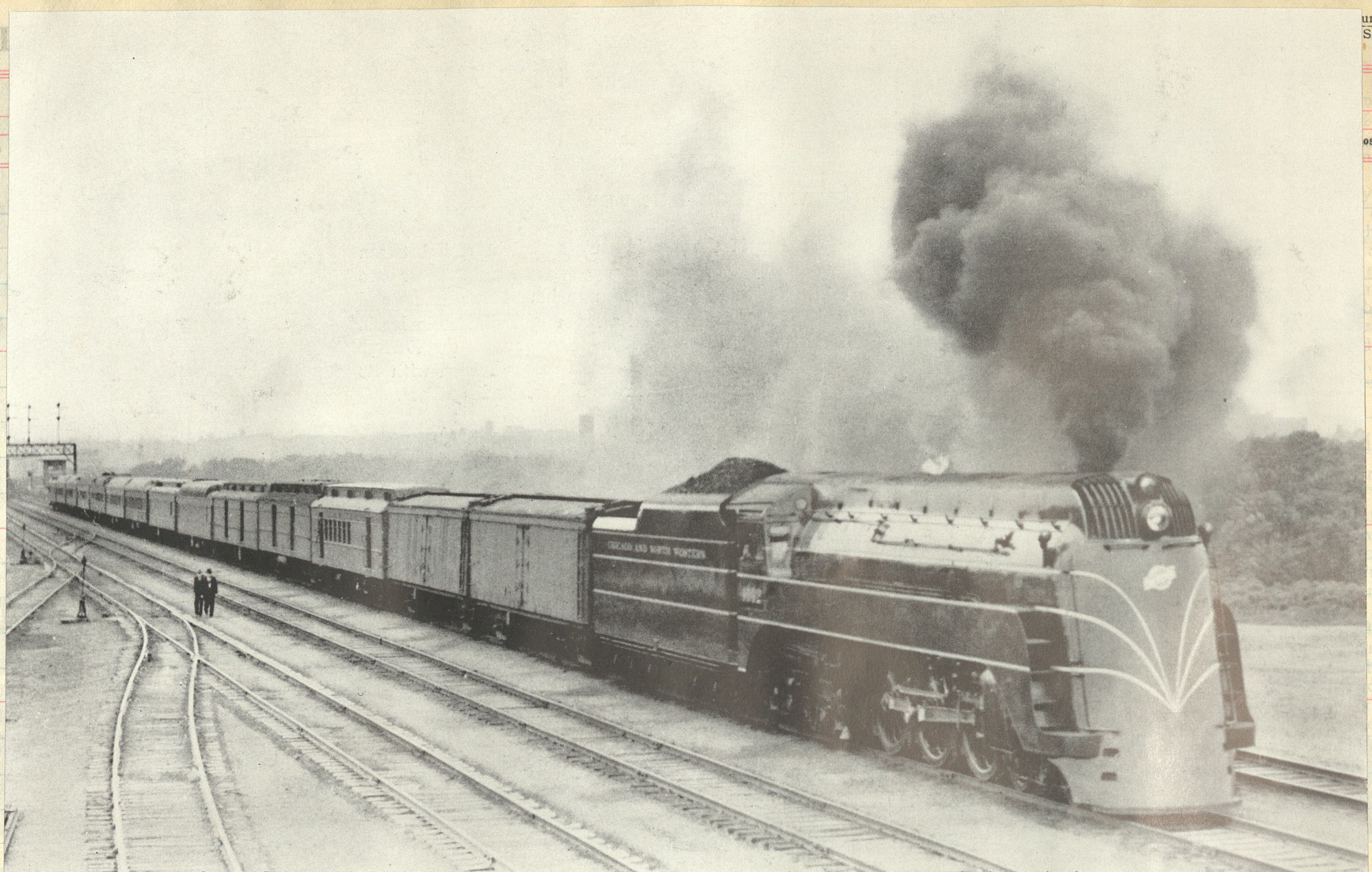
LOW FARES CHICAGO TO

**California**

| | |
|---|---|
| One Way—Coaches | $39.50 |
| Round Trip—Coaches (ret. limit 6 mo.) | 65.00 |
| One Way in Tourist Sleepers (berth extra) | 49.90 |
| Round Trip in Tourist Sleepers (berth extra) (return limit 6 months) | *74.00 |
| Tourist Lower Berth—One Way | 8.95 |
| One Way in Standard Sleepers (Pullman accommodations extra) | 66.53 |
| Round Trip in Standard Sleepers (Pullman accommodations extra) (return limit 30 days) | *90.30 |
| Pullman Lower Berth—One Way | 16.55 |

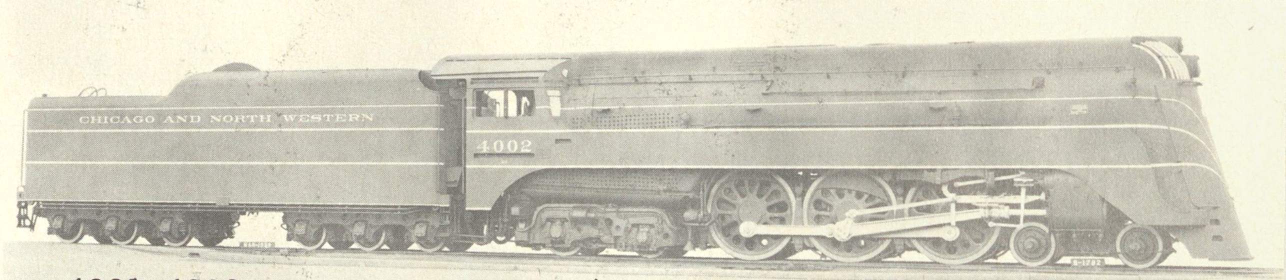
** Return limit 3 months for tickets purchased on and after February 1*

Chicago & North Western Ry.

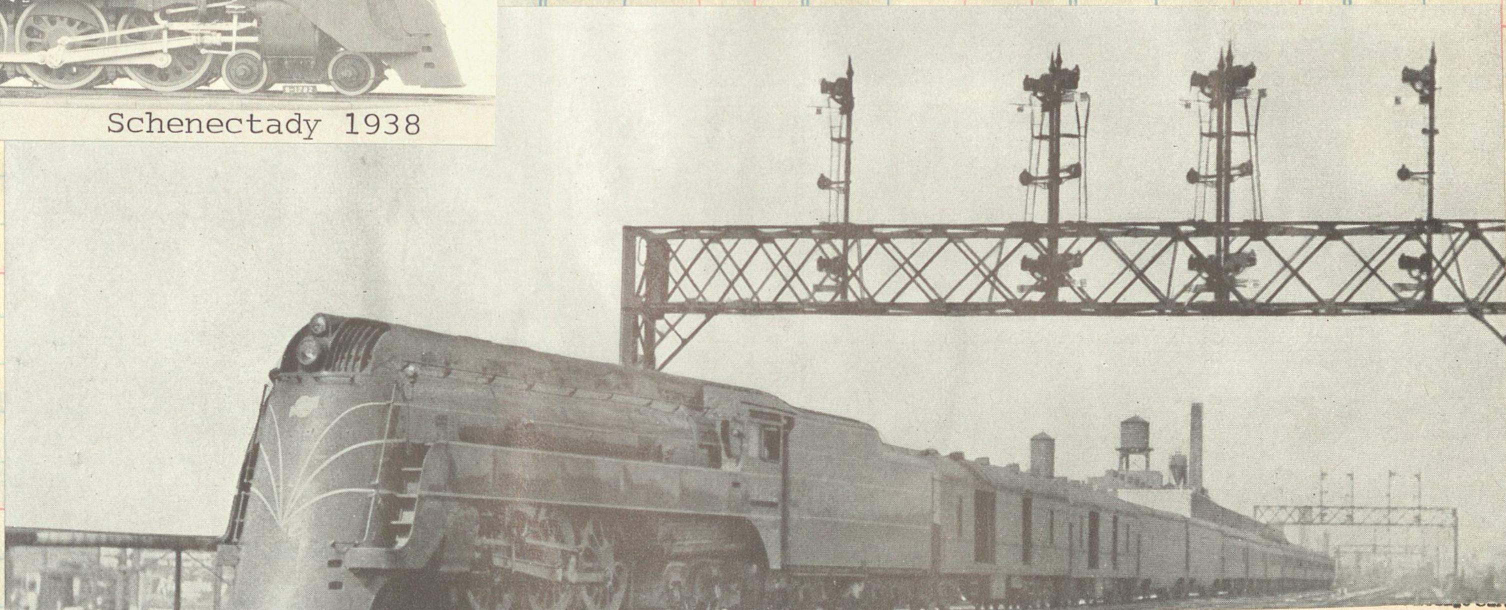


A brand new 4-6-4, the 4002, leaves Omaha with the "Pacific Limited"

**No. 14—DAILY. (★) Pacific Limited.**
San Francisco to Chicago.
*Route S. P. Lines Ogden; U. P. R. R. Omaha; C. & N. W. Ry. Chicago.*
12 Sec.-1 D. R. Sleeping Car.
16 Sec. Tourist Sleeping Car.
Club Lounge Car Service. (Radio).
Dining Car Service. Through Coach.

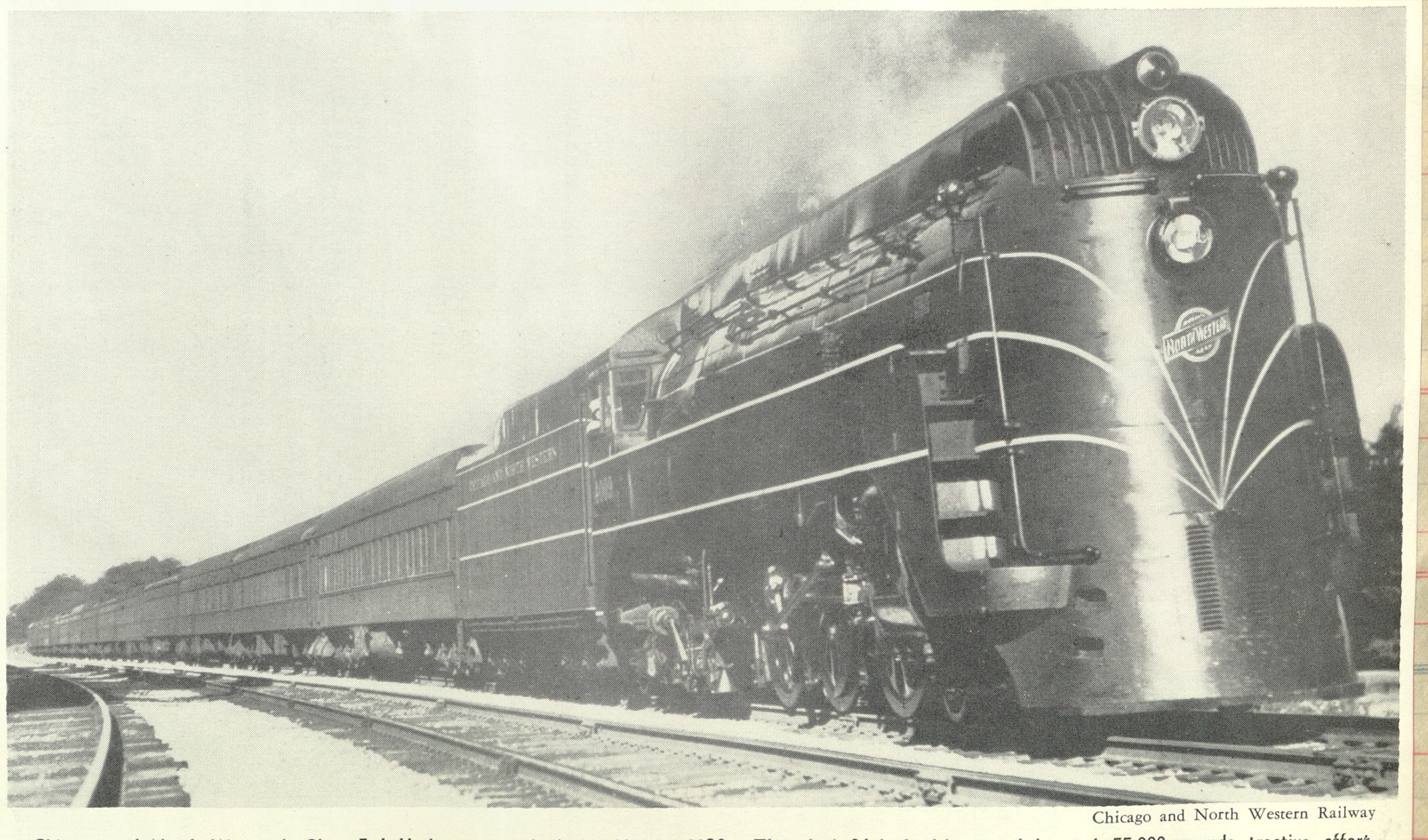


4001-4009 c/n 69028 Schenectady 1938



#28 on approaches to Chicago

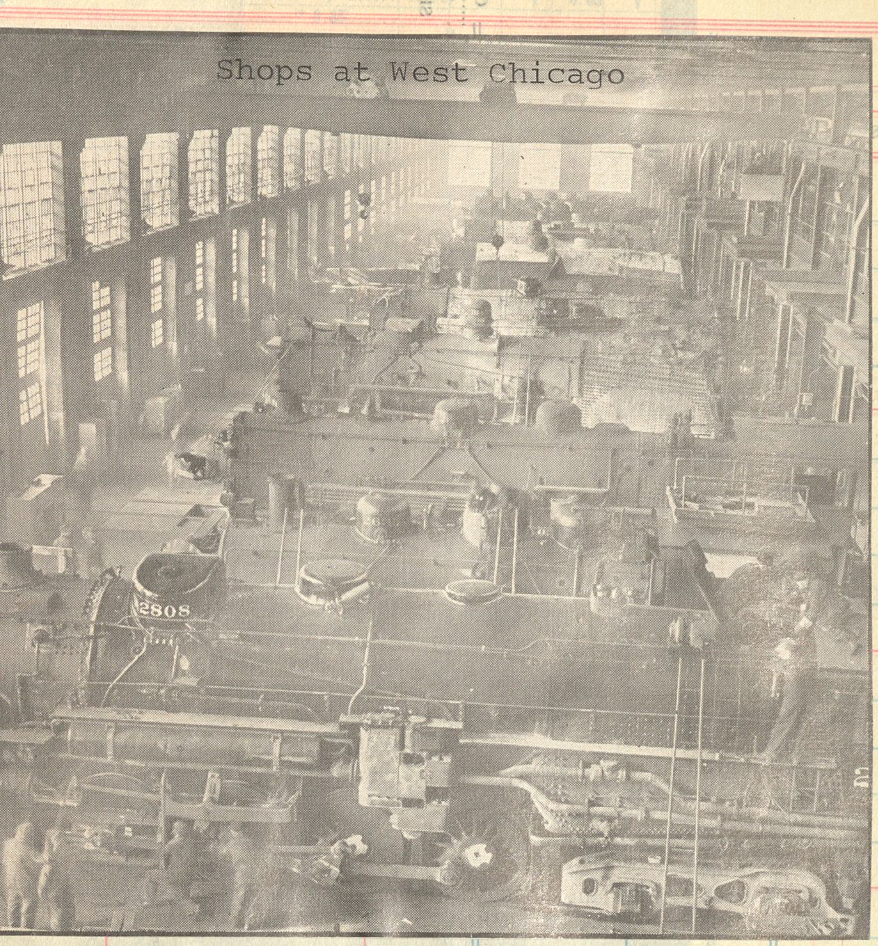
**No. 28—DAILY. (★) San Francisco Overland Limited. (All Pullman)**
San Francisco to Chicago.
*Route S. P. Lines Ogden; U. P. R. R. Omaha; C. & N. W. Ry. Chicago.*
Buffet Club Car. (Radio). Valet and Registered. Nurse Stewardess service, barber and bath
Club Lounge Car. 6 Compt.-3 D. R. Sleeping Car.
14 Sec. Sleeping Car.
6 Sec.-6 Double Bedroom Sleeping Car.
Through Dining Car.
Omaha to Chicago. 12 Sec.-1 D. R. Sleeping Car.



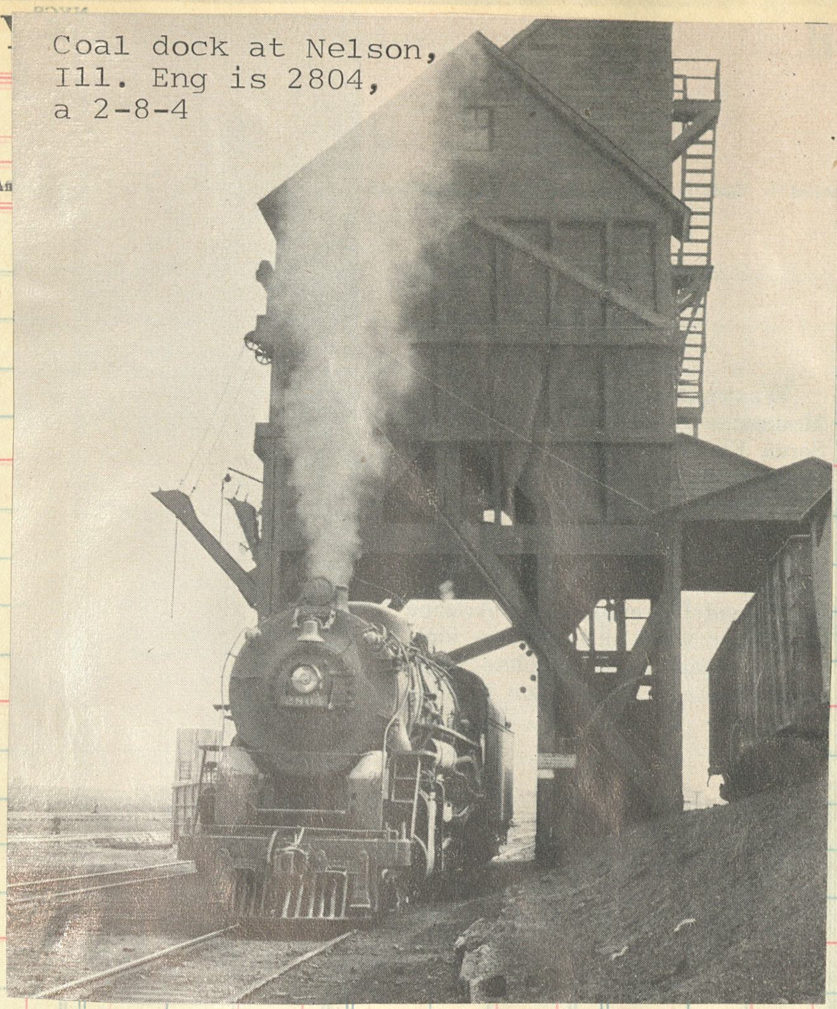
Chicago and North Western Railway

Chicago and North Western's Class E-4 Hudsons were built by Alco in 1938. They had 84-inch drivers and boasted 55,000 pounds tractive effort. The 4009 was the last of a group of nine built primarily for the Challengers, Chicago-California trains. Note the heavyweight consist.

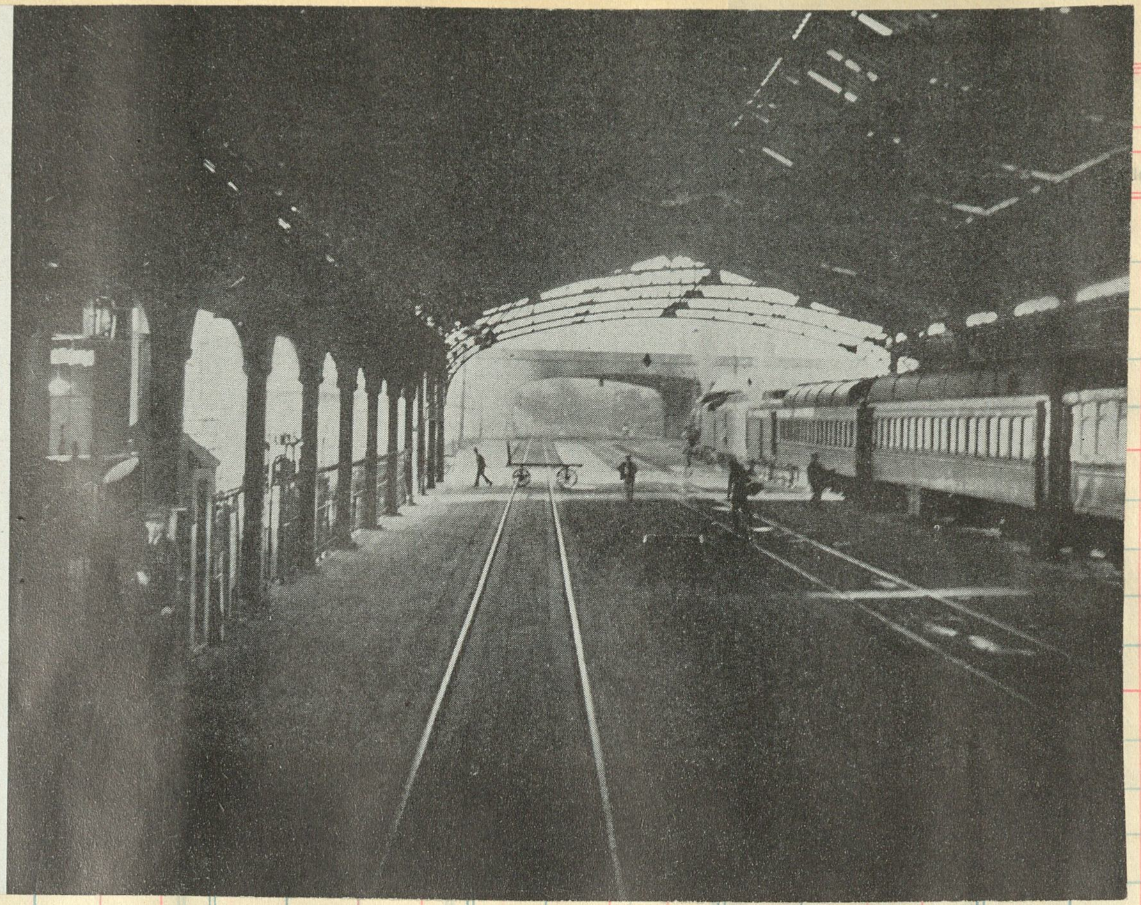
Shops at West Chicago

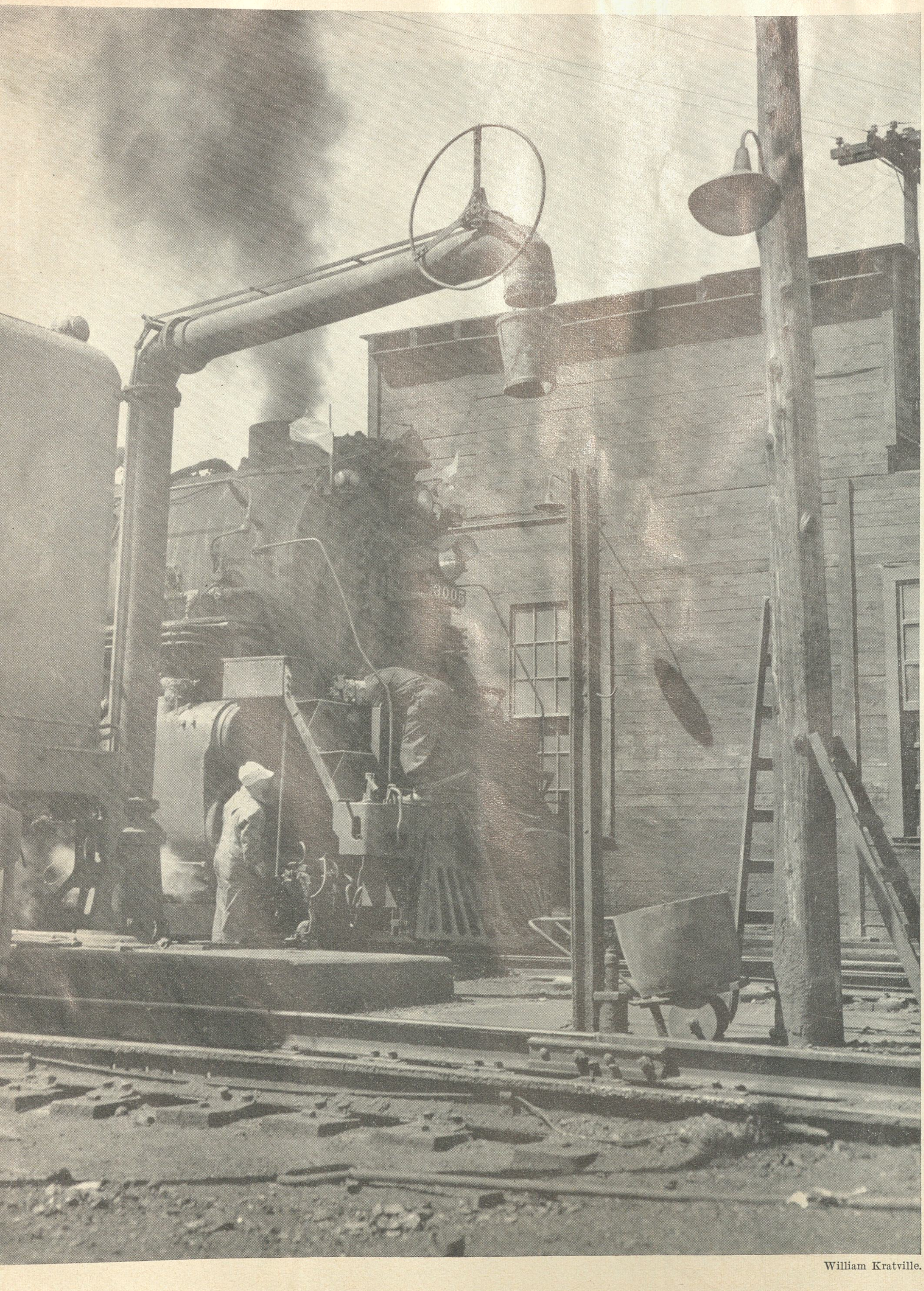


Coal dock at Nelson, Ill. Eng is 2804, a 2-8-4



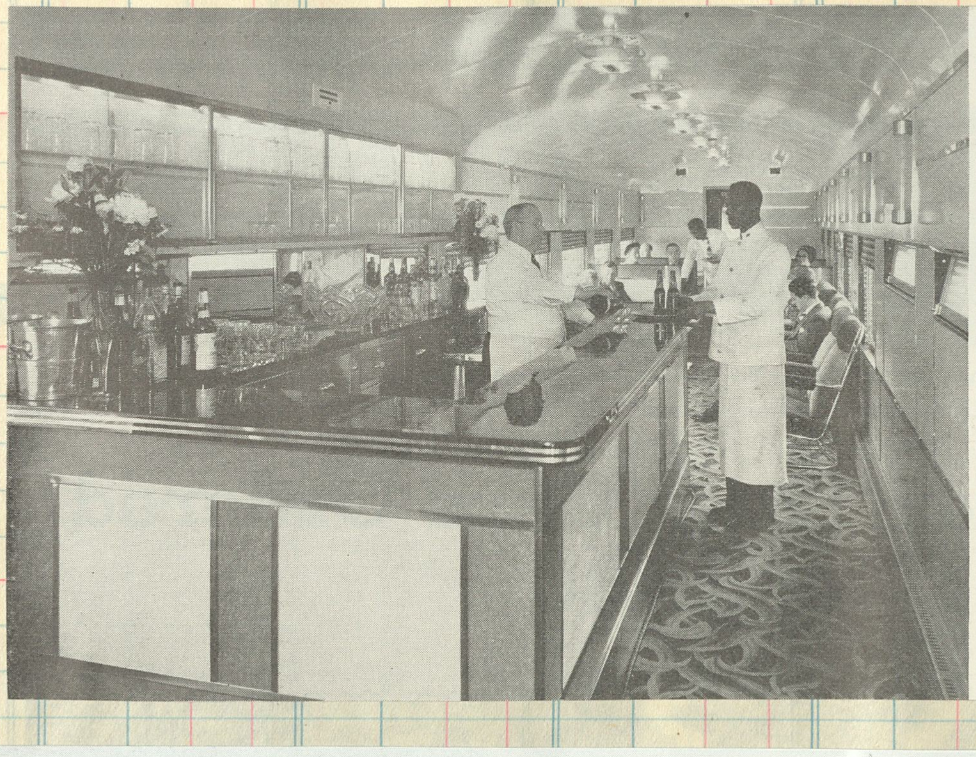
Train shed at Milwaukee





William Kratville.

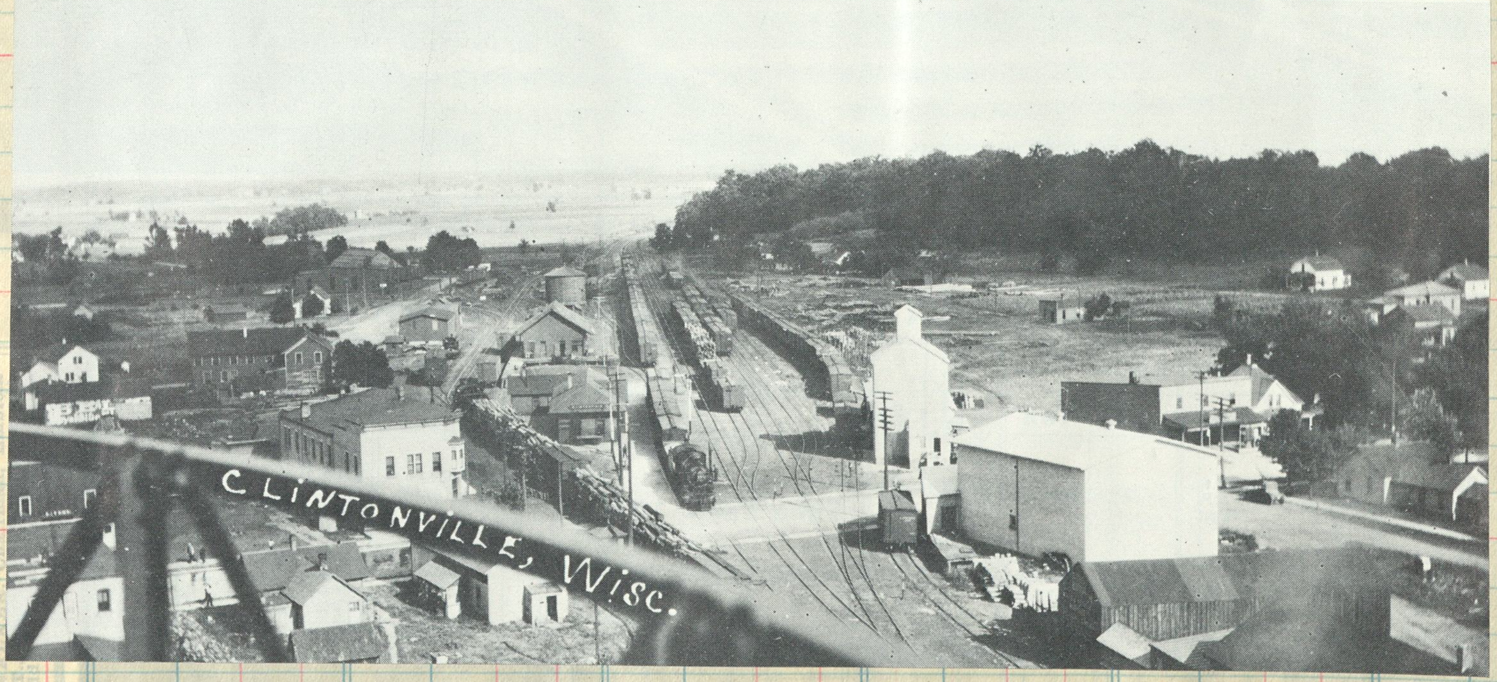
doubtedly the railroad workers most revered by people outside the industry are those who care for and operate the living, breathing locotives — men such as these two, who are inspecting a Chicago & North Western class H-1, readying it for a freight out of Council Bluffs, Ia.



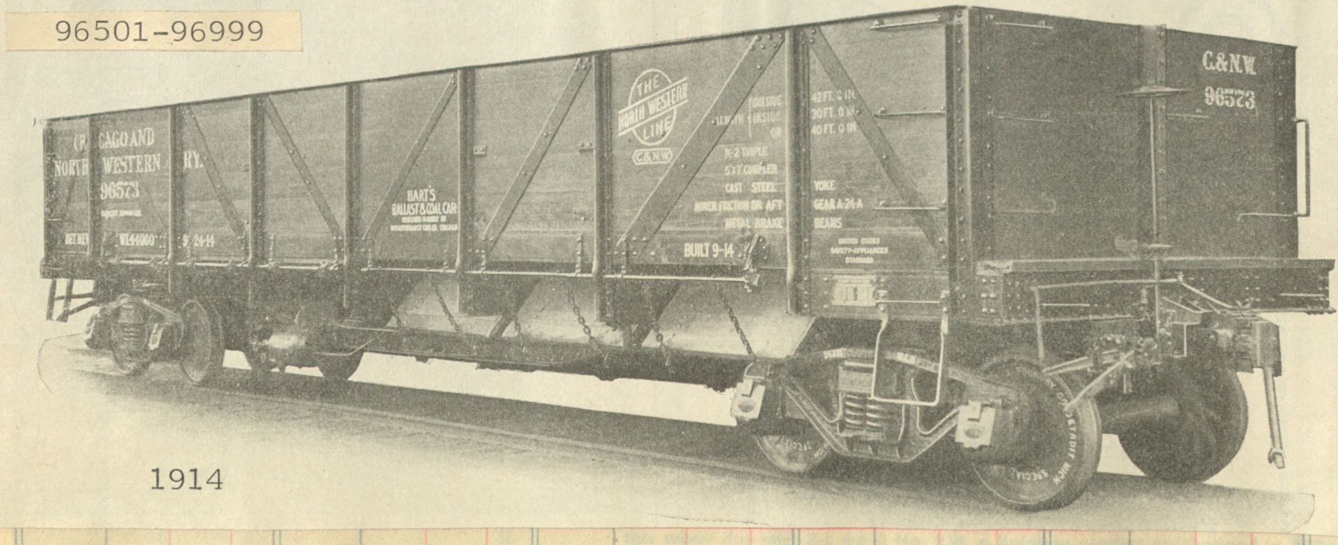
The Bar in the Chicago & North Western Buffet-Lounge Car "Flambeau"

1936

B


CLINTONVILLE, Wisc.

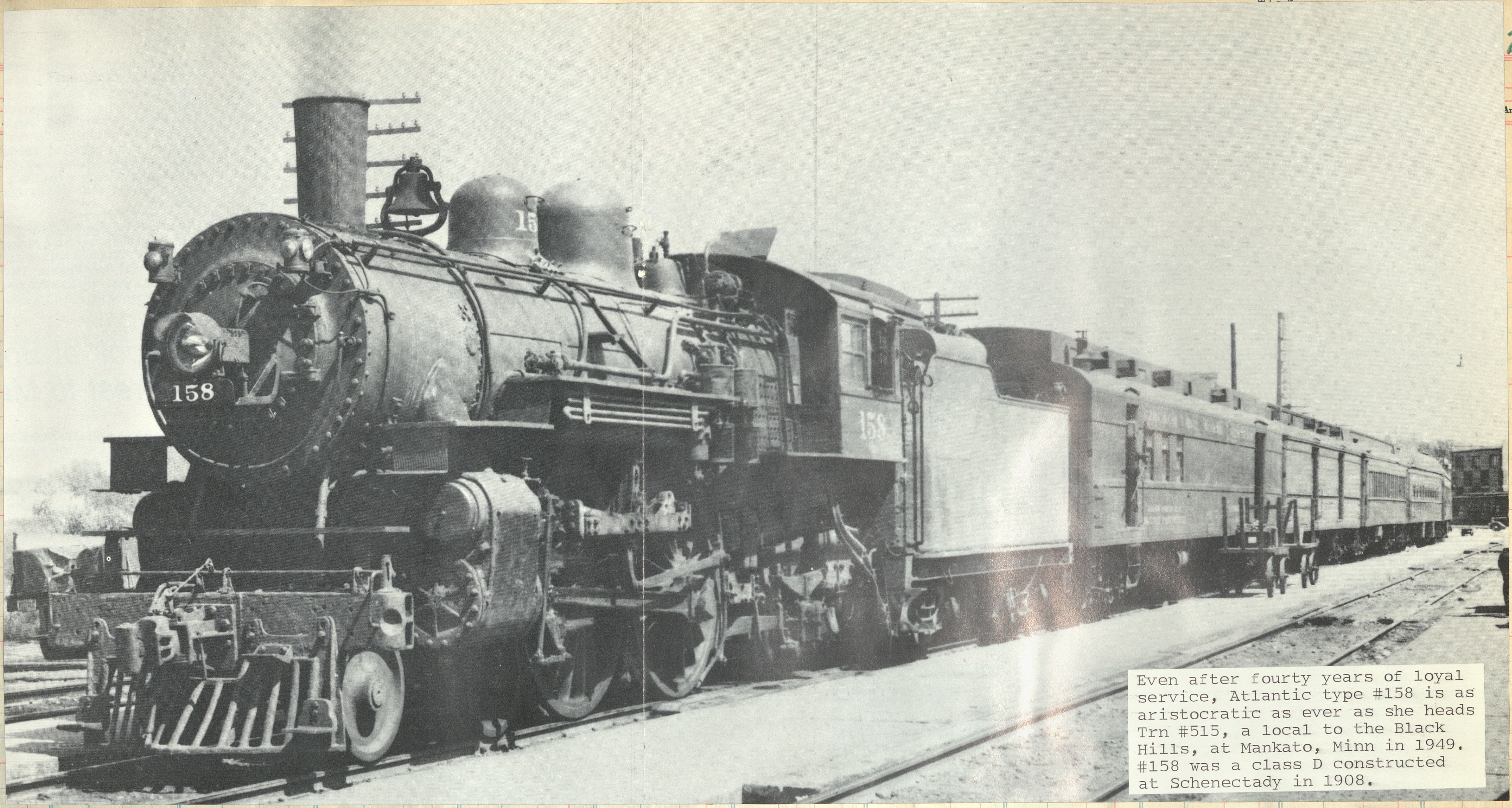
96501-96999


C.&N.W.
96573
CHICAGO AND NORTH WESTERN RY.
96573
THE NORTH WESTERN LINE
C&NW
HART'S BALLAST & COAL CAR
BUILT 9-14

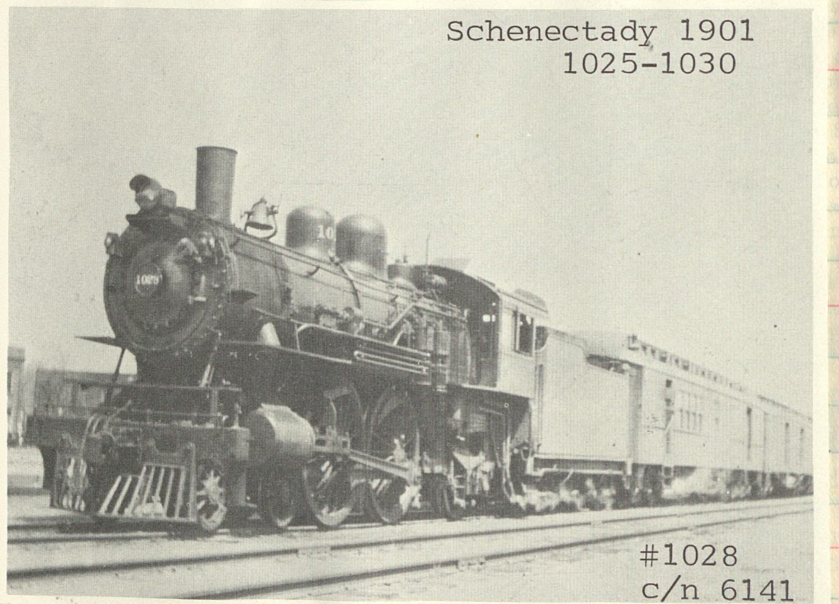
1914

Clos. No. Sold

Amount

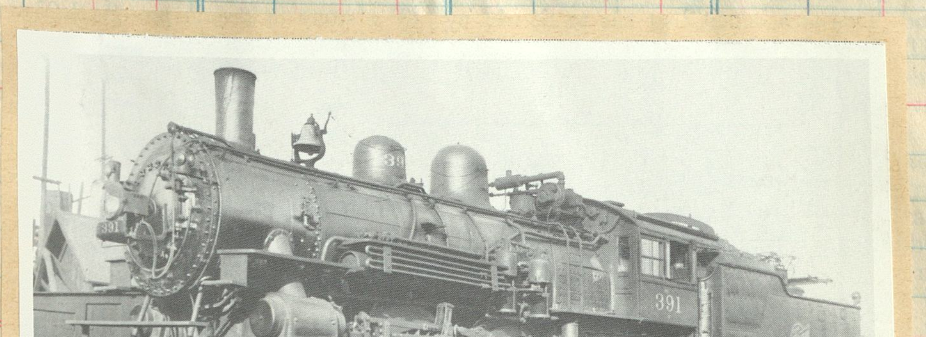


Even after fourty years of loyal service, Atlantic type #158 is as aristocratic as ever as she heads Trn #515, a local to the Black Hills, at Mankato, Minn in 1949. #158 was a class D constructed at Schenectady in 1908.

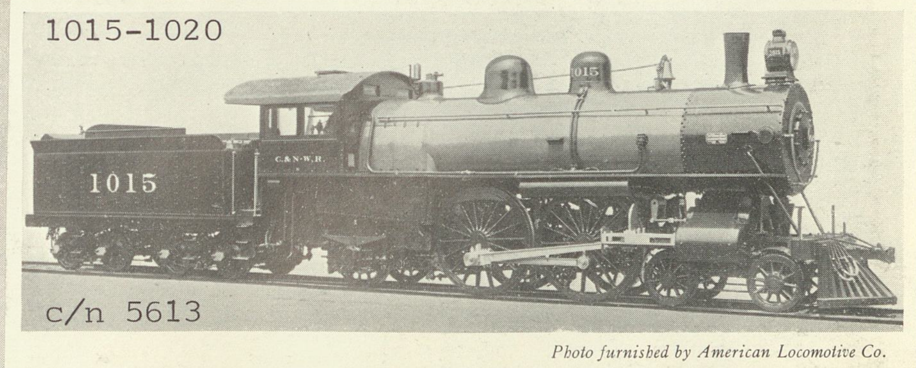


Schenectady 1901
1025-1030

#1028
c/n 6141



390-399 c/n 45703 Schenectady 1908

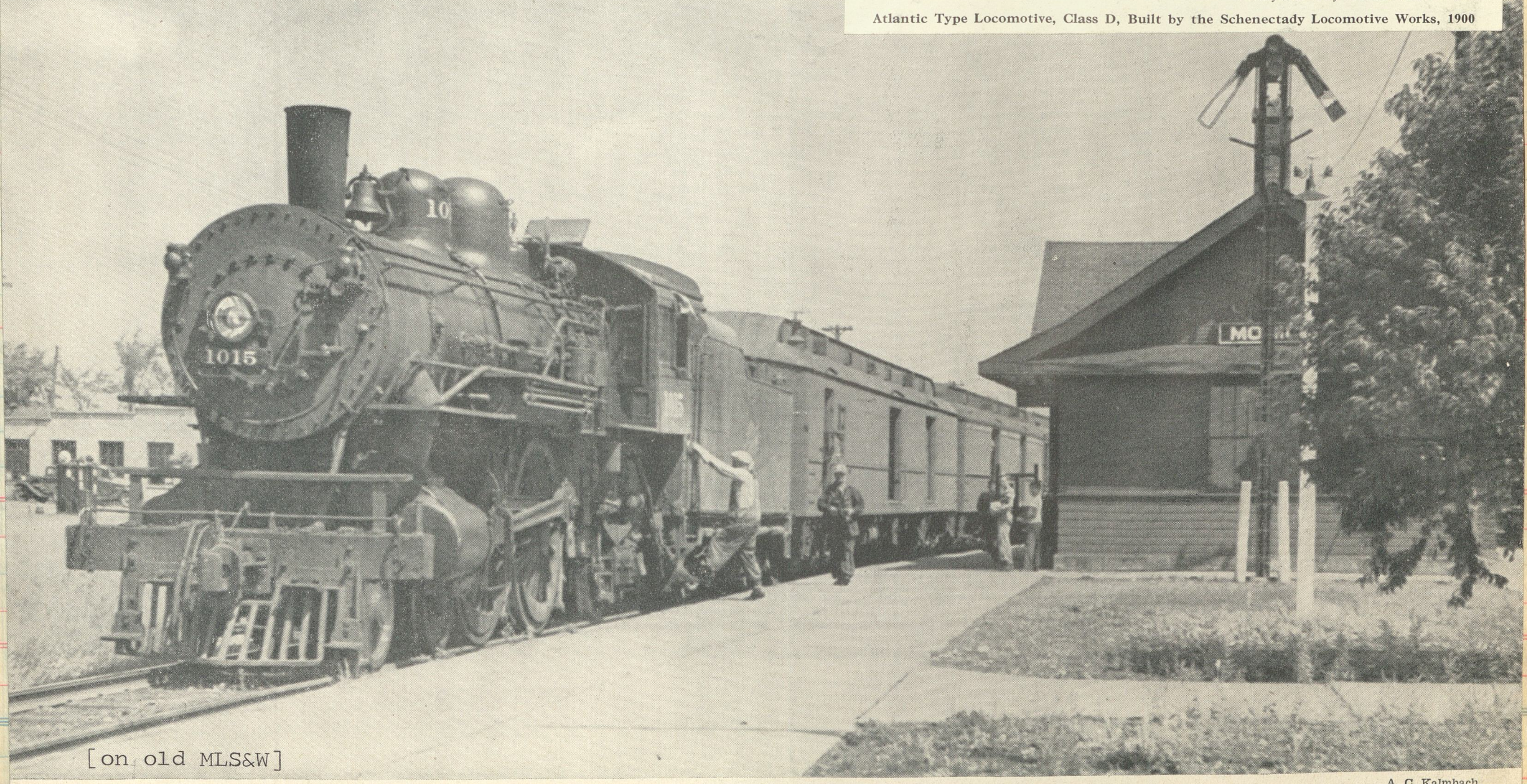


1015-1020

c/n 5613

*Photo furnished by American Locomotive Co.*

**Atlantic Type Locomotive, Class D, Built by the Schenectady Locomotive Works, 1900**



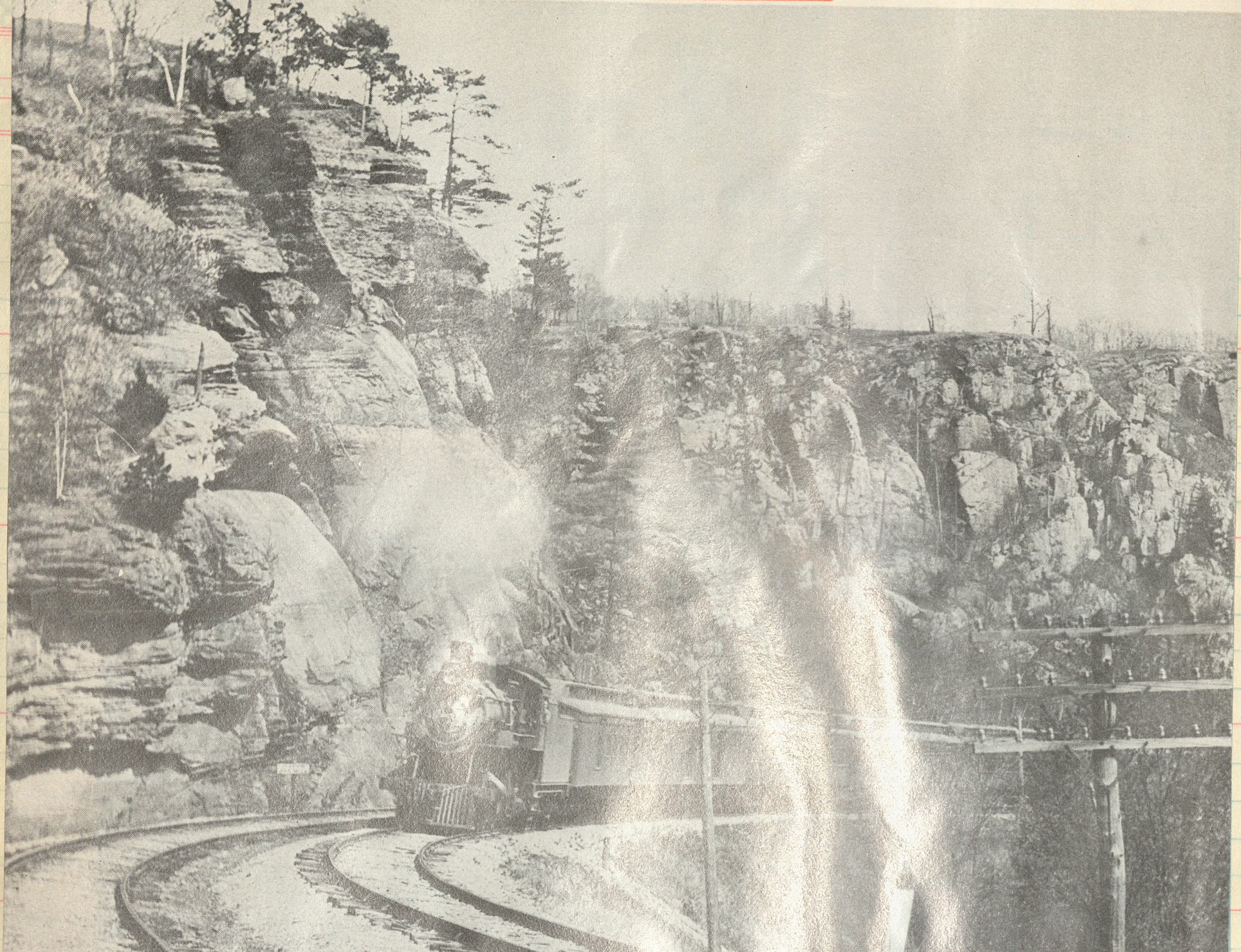
[on old MLS&W]

A. C. Kalmbach.

**THE ASHLAND MAIL**

Chicago & North Western's Ashland Mail is normally only a motor coach handling one mail storage car when it reaches Monico, Wis., but during Wisconsin's vacation season it is sometimes hauled by steam, as it is here. No. 1015 is C&NW's first Atlantic, built by Schenectady in 1900.

"BADGER STATE EXPRESS"

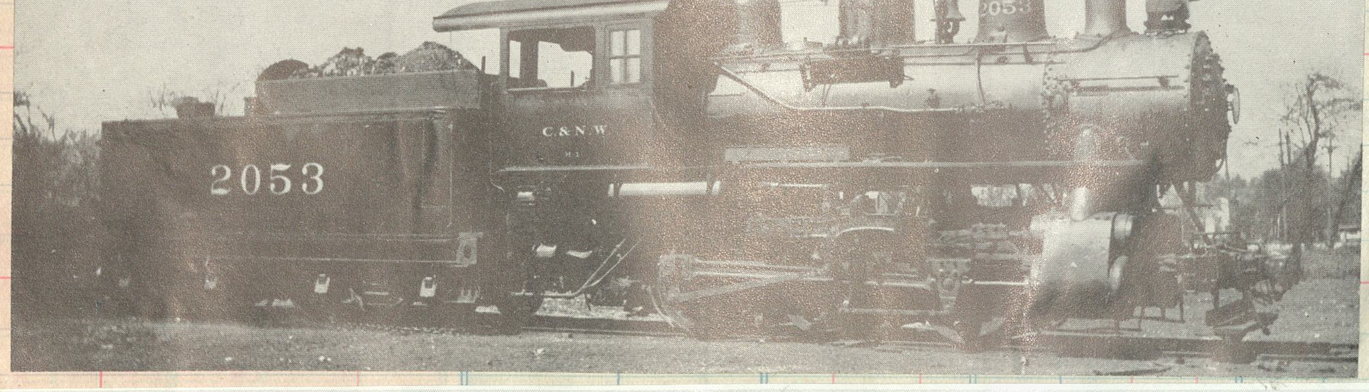


**No. 501—BADGER STATE EXPRESS**—Daily. Wide Vestibuled Train with Observation Cafe Parlor Car (serving meals a la carte, if desired, to all passengers on the train), and Coaches Chicago to St. Paul and Minneapolis.

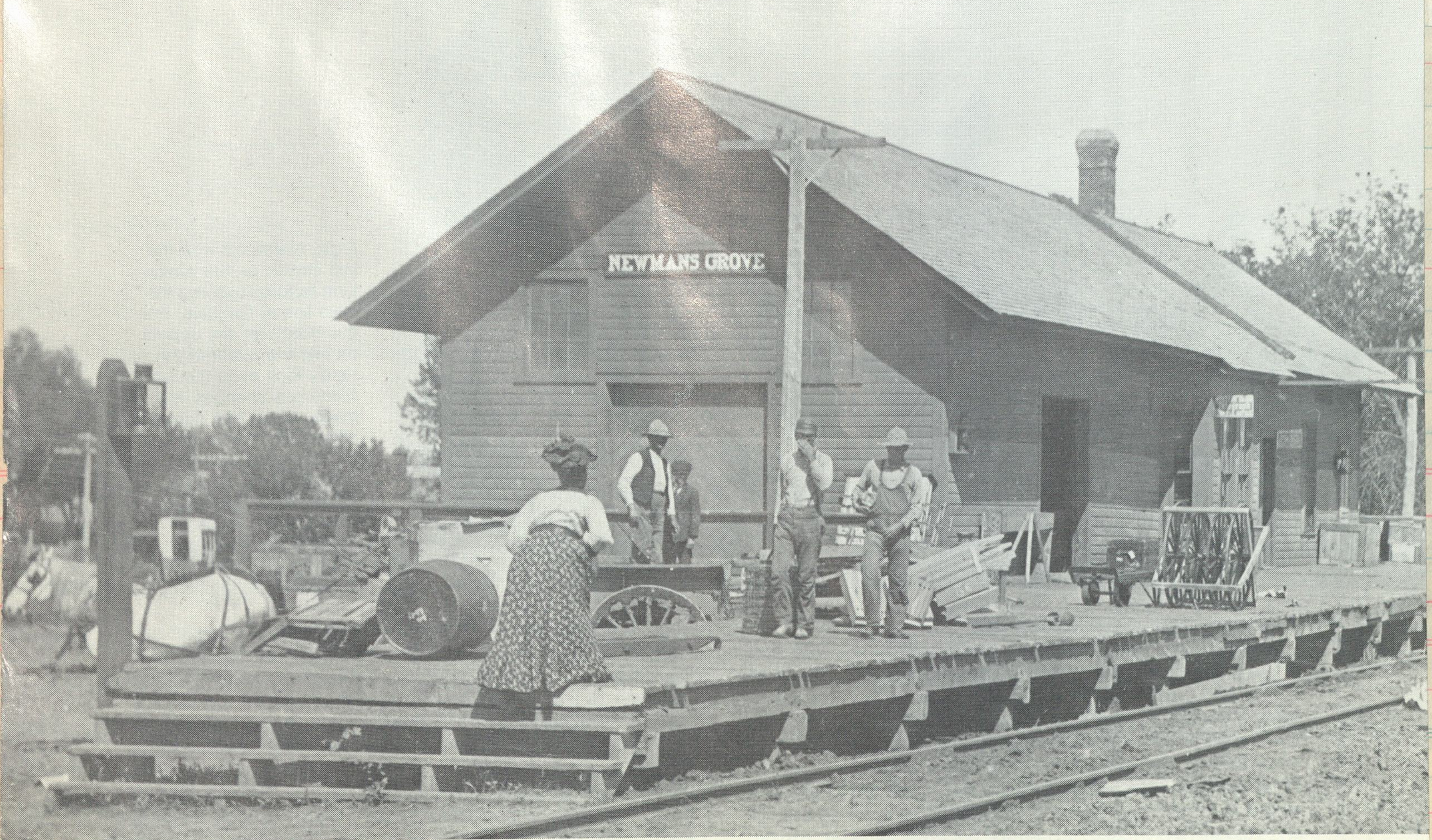
[1905]

A scene from the "Golden Era". A perky Atlantic, #1027, swings thru the curves of Ableman Narrows with the first class varnish north of Baraboo, Wis on the Chicago-Twin Cities main line. Note running on left hand track.

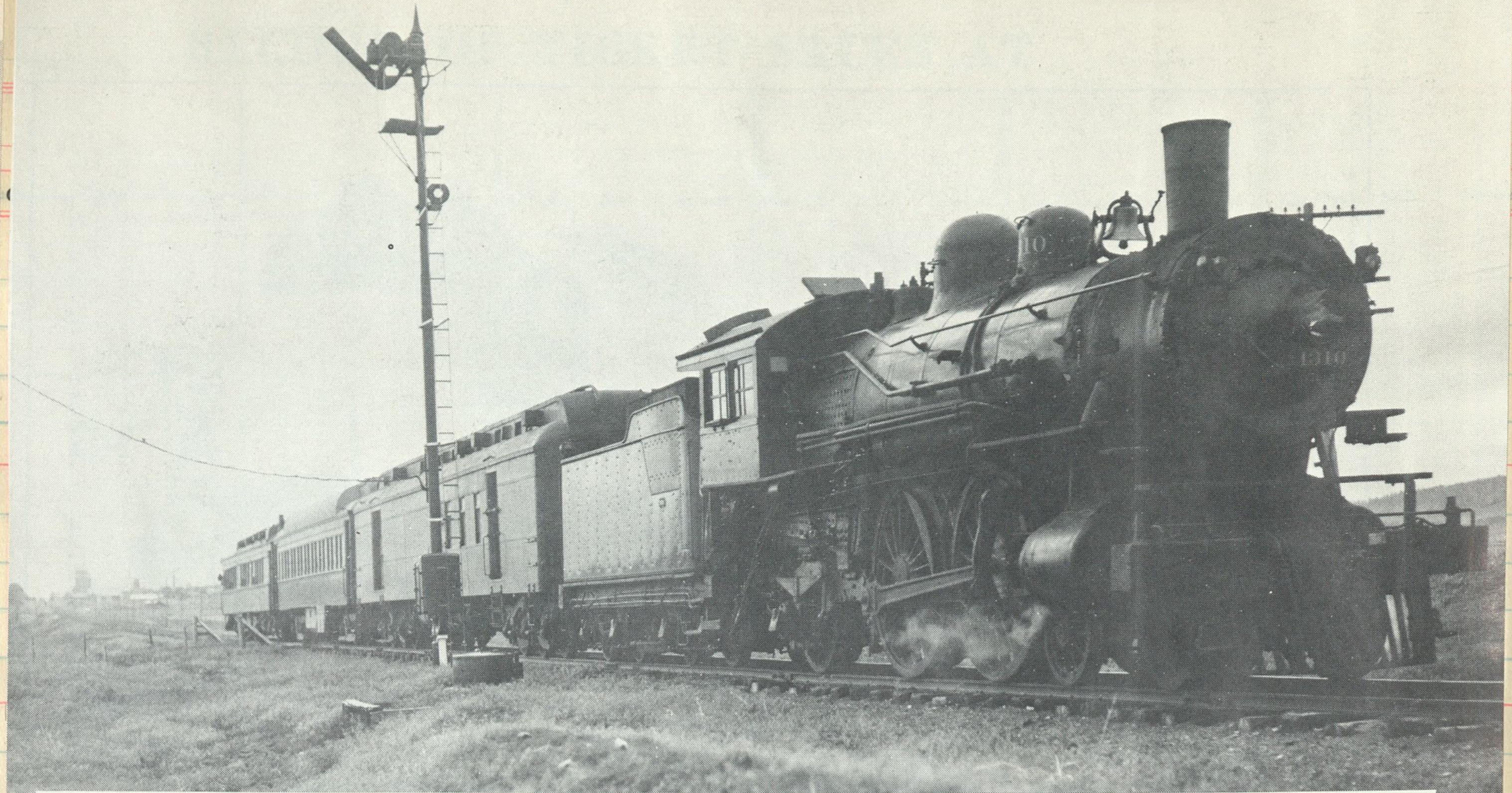
Schen 1914 Class M-1
Cyls 18x24 dvs 51" TE 23,300#
2044-2061



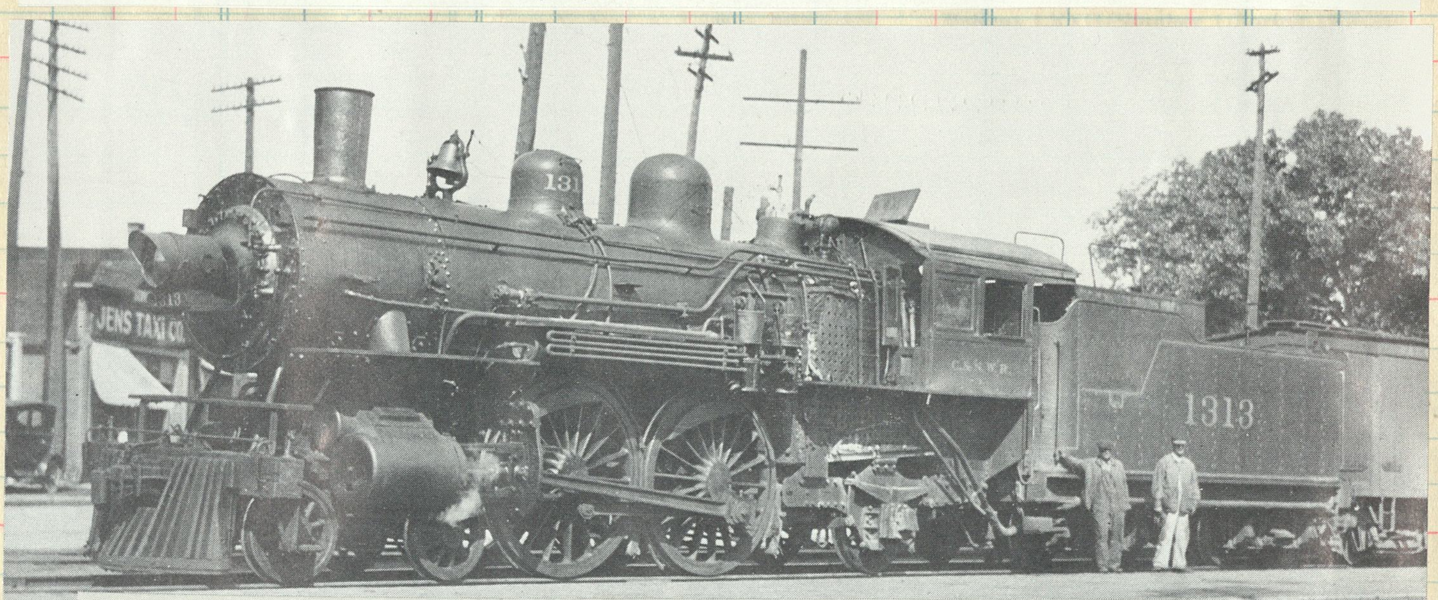
"Hey, Henry--Look out! Here comes your missus!"



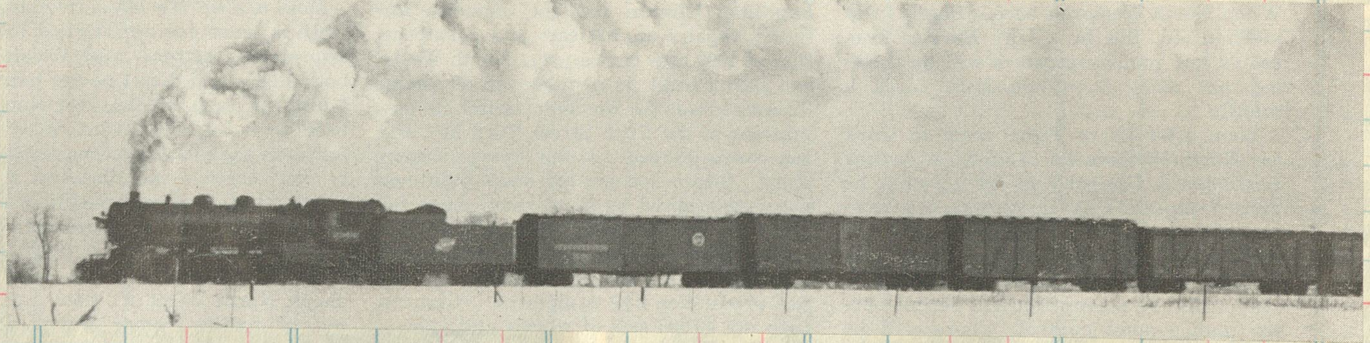
Newman's Grove, Nebraska, this view shows the depot as it was originally built. The activity on the platform suggests that the way freight has completed it's station work and left behind an assortment of merchandise. Trainmen of way freights were required to load and unload less-than-carload-lots of merchandise such as that seen on this platform as part of their duties. This view is from the collection of Caryl Olson.



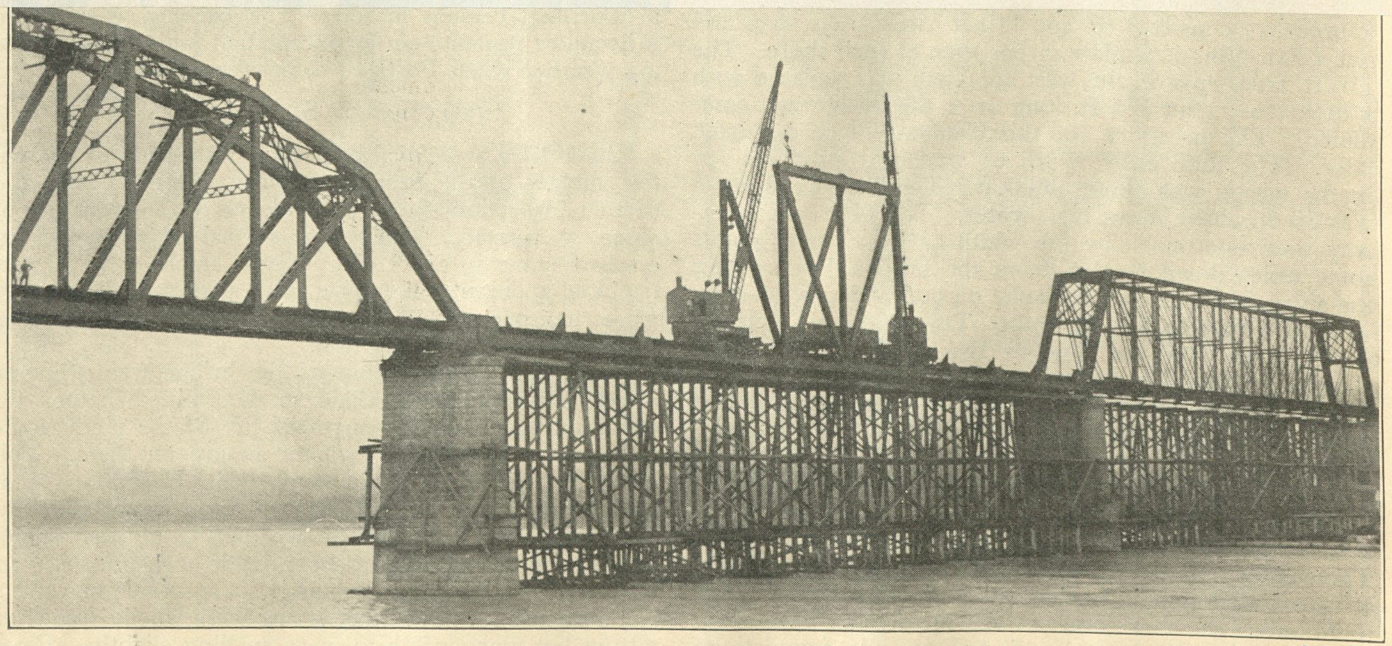
Engine 1310 and train number 15 west of Chadron, Nebraska enroute to Rapid City, South Dakota on May 31, 1937. According to the 1937 timetable, train number 15 is a motor car train. Yet, it appears that the rear car is a business car which would account for the use of steam power on this occasion. Engine 1310, at the Schenectady works of the American Locomotive Company in May of 1906. Photo by Otto Perry, from the collection of the Denver Public Library, Western History Department.



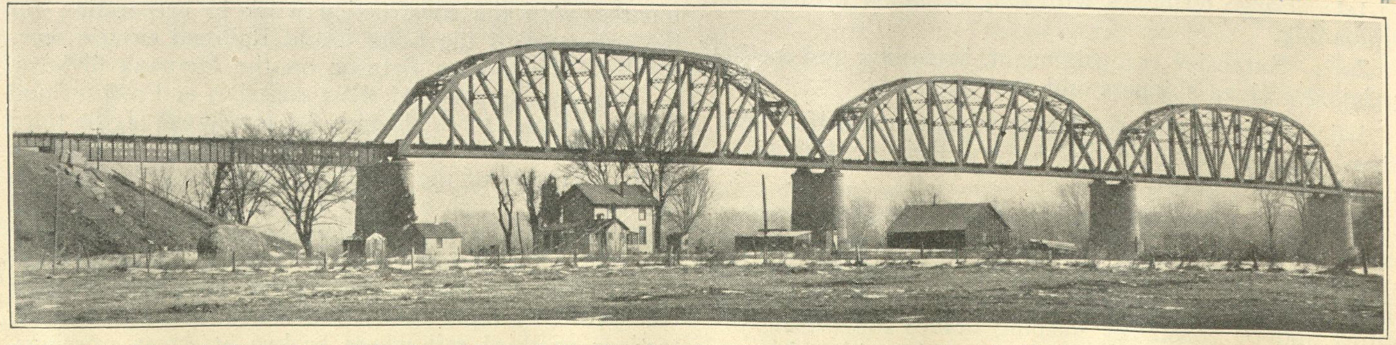
The 1313, an oil burner, at Fremont, Neb on May 31, 1922.
1308-1317 c/n 39252 Schenectady 1906



The rebuilt Blair Bridge using the orginal piers constructed by Missouri Valley & Blair Railway & Bridge Co of the first bridge built in 1882 for the Sioux City & Pacific. Truss spans are each 330'.

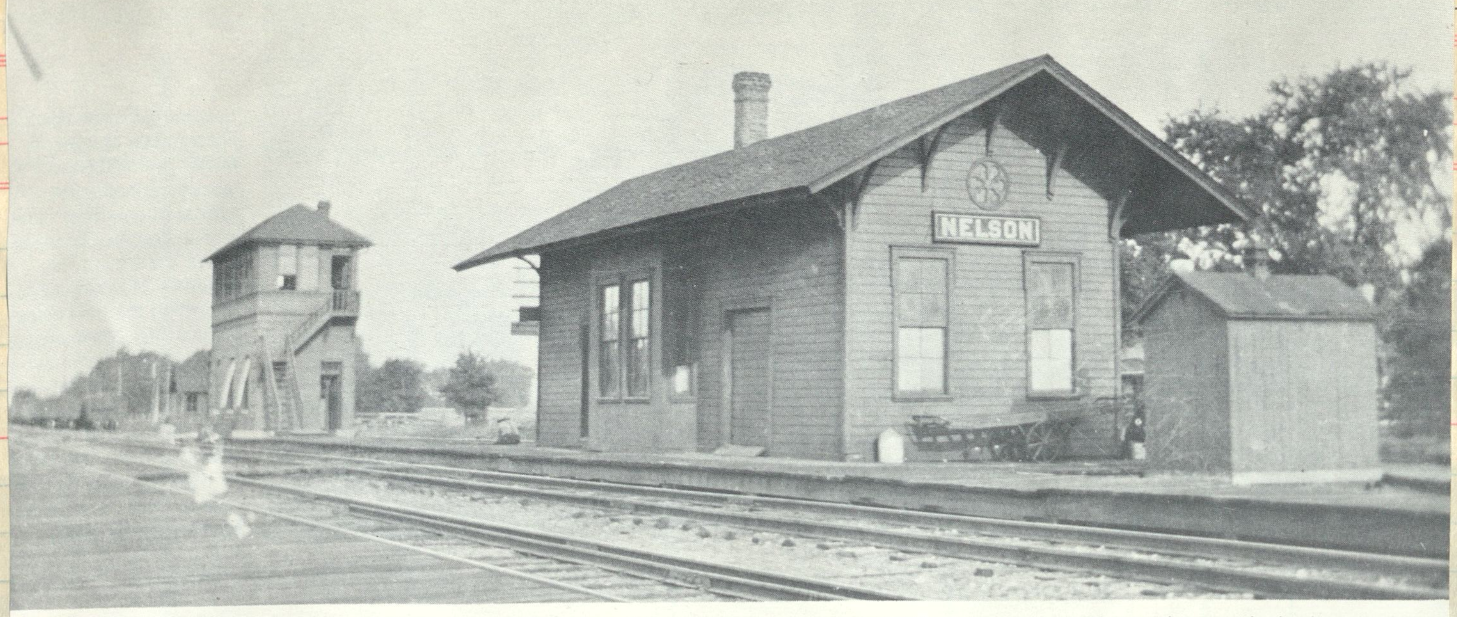


Erecting Center Span. West Span Erected, and False Work Removed. Original East Span Not Yet Dismantled. 1923

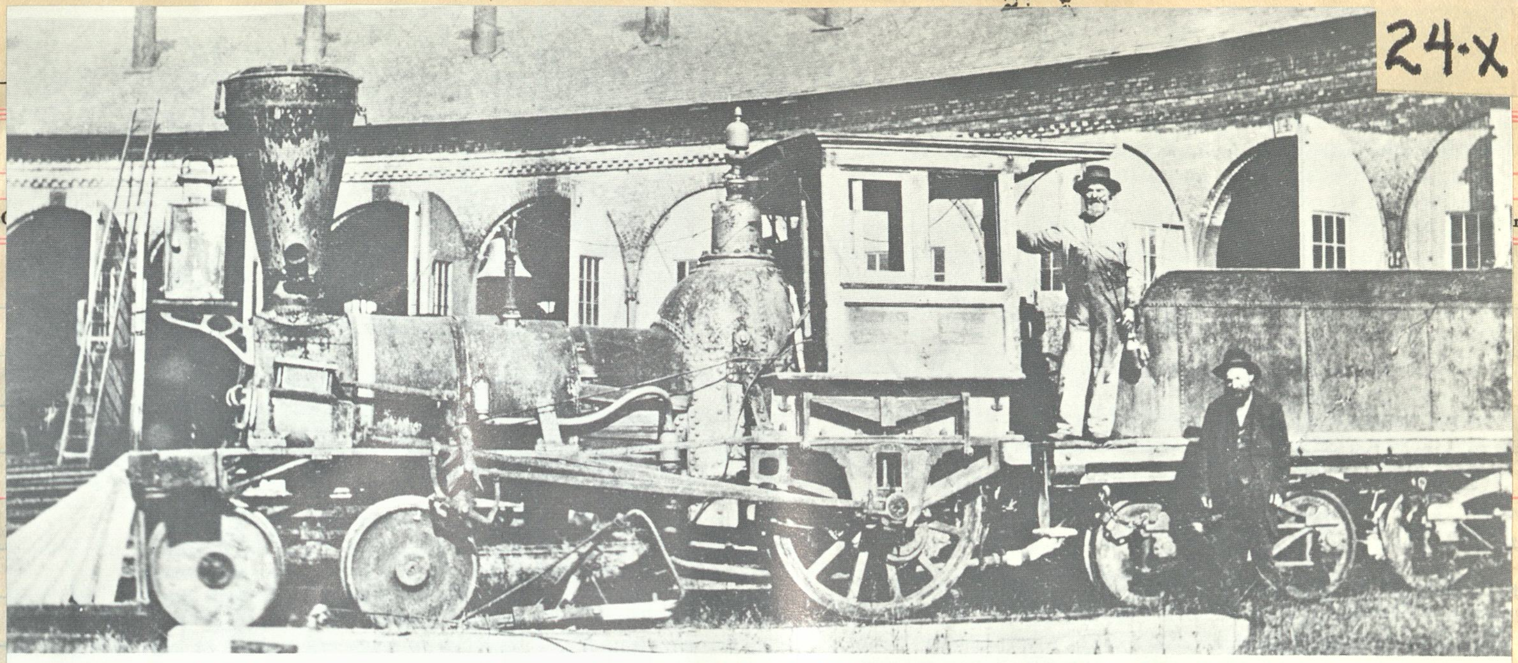


Bridge Over Missouri River, Blair, Nebraska, Chicago & Northwestern Ry. The Completed Structure, Looking North from West Bank of River.

24-X

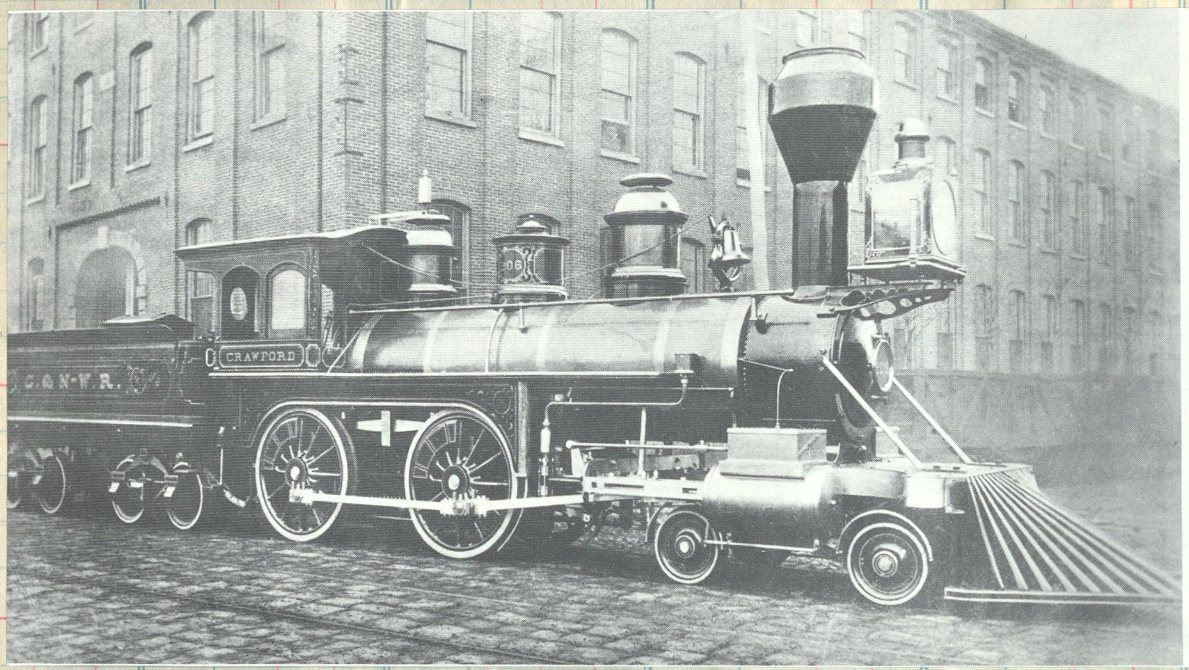


The Southern Illinois Division began at Nelson, Illinois. This view of the station was made in 1912. Beyond the station to the west is the interlocking tower which controlled train movements on the Galena Division and the Southern Illinois Division which branched off to the south on a double-tracked wye. Within the wye was a 19 stall roundhouse and locomotive servicing facilities. Further to the south, just beyond the juncture of the wye, was a freight yard. Photo by Earl Kelsoh, from the collection of Paul H. Stringham.



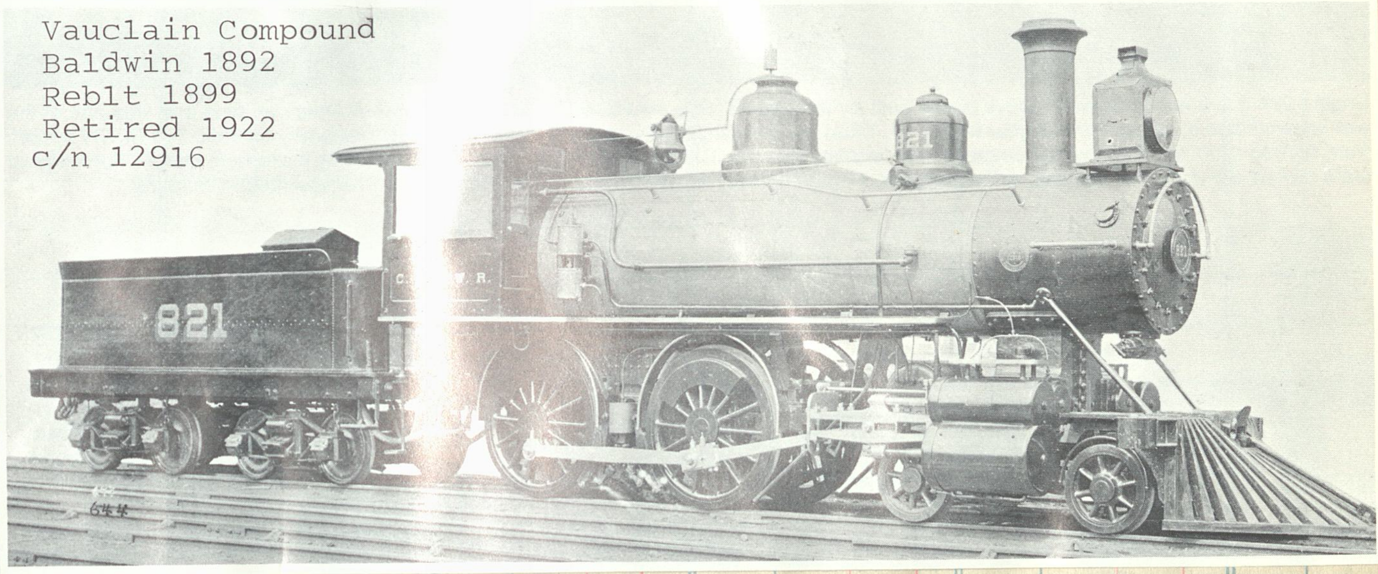
The G&CU's first locomotive, the *Pioneer*, is shown here at the West Chicago roundhouse in about 1871. As the demands on locomotives increased and operating distances grew, the need for greater fuel and water capacity became a concern. As a result, the Pioneer's original four-wheel tender was replaced by a more conventional, larger eight-wheel tender. The Pioneer had 54-inch drivers, carried an operating steam pressure of 100 pounds and developed a tractive effort of 3,428 pounds. She was retired from active service in 1873 and has since that time been displayed at many expositions and fairs. Photo courtesy of the Chicago & North Western Transportation Company.

Blt as Utica & Schenectady #7 in 1836 by Baldwin c/n 37. Sold to M.C. then the C&GU.

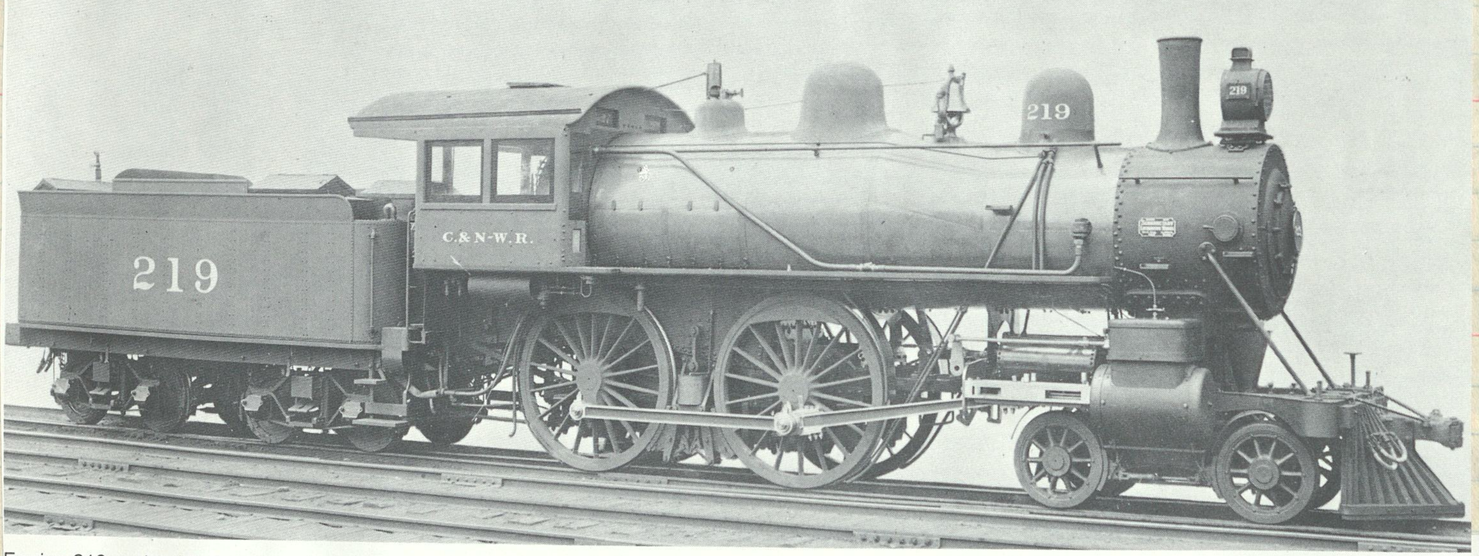


c/n 1575

Engine 206, the Crawford, a class D-5, American type, was built by Baldwin in 1867 and scrapped in 1900. The Crawford was one of 40 locomotives built for the C&NW in 1866 and 1867. Photo from the Baldwin Locomotive Company, collection of A. W. Johnson

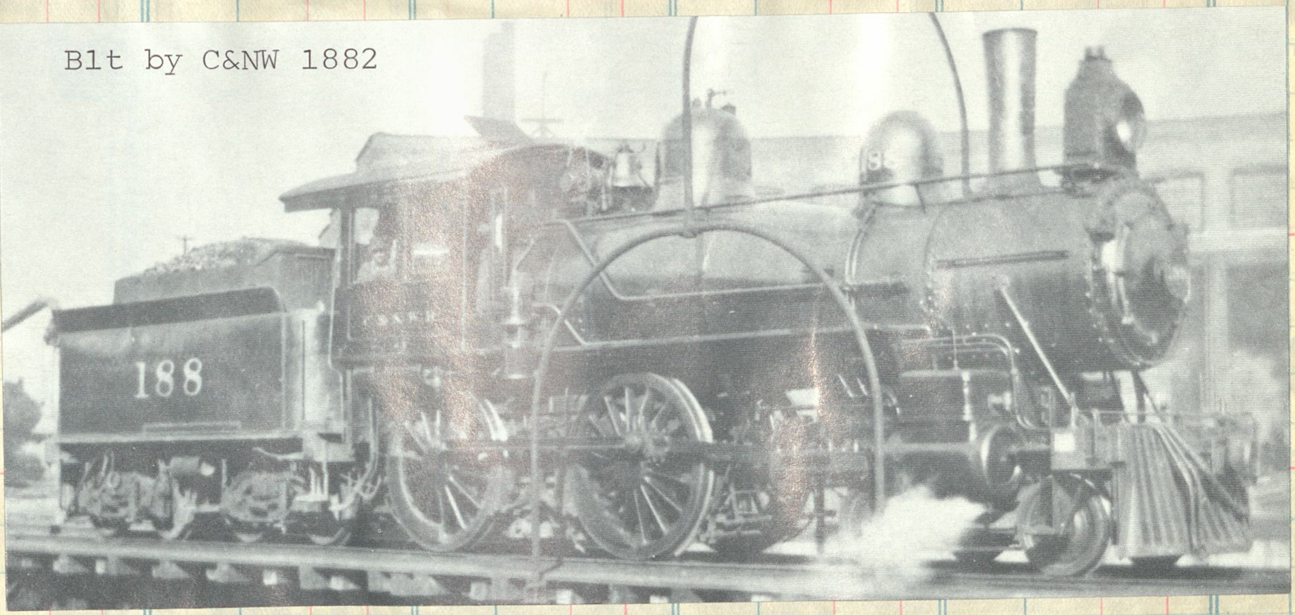


Vauclain Compound
Baldwin 1892
Reblt 1899
Retired 1922
c/n 12916

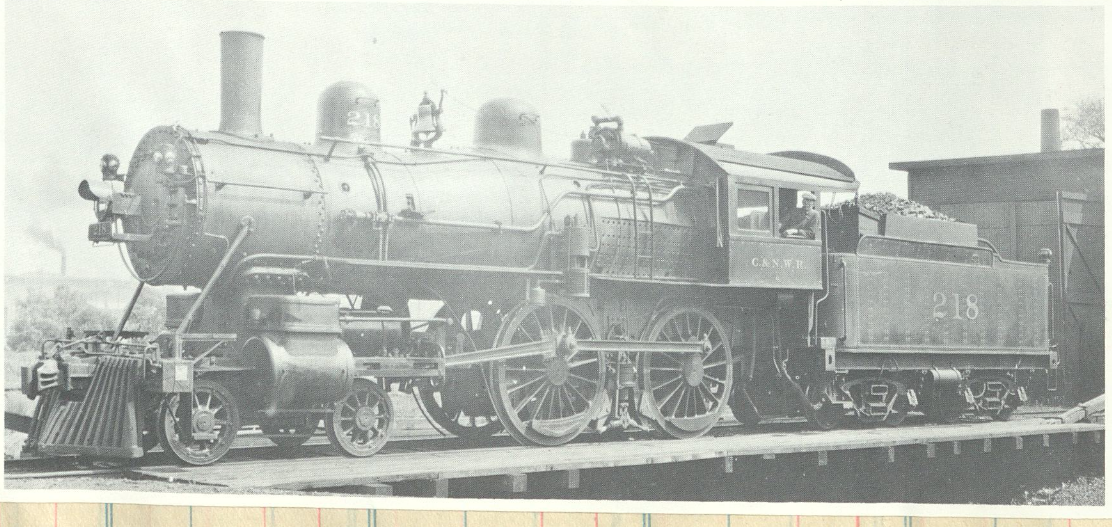


Engine 219, a class C, American type locomotive built by Schenectady in 1899 for fast mail and passenger service. Engine 219 had 80-inch drivers, carried a steam pressure of 190 pounds, and developed a tractive force of 18,950 pounds. Photo from the American Locomotive

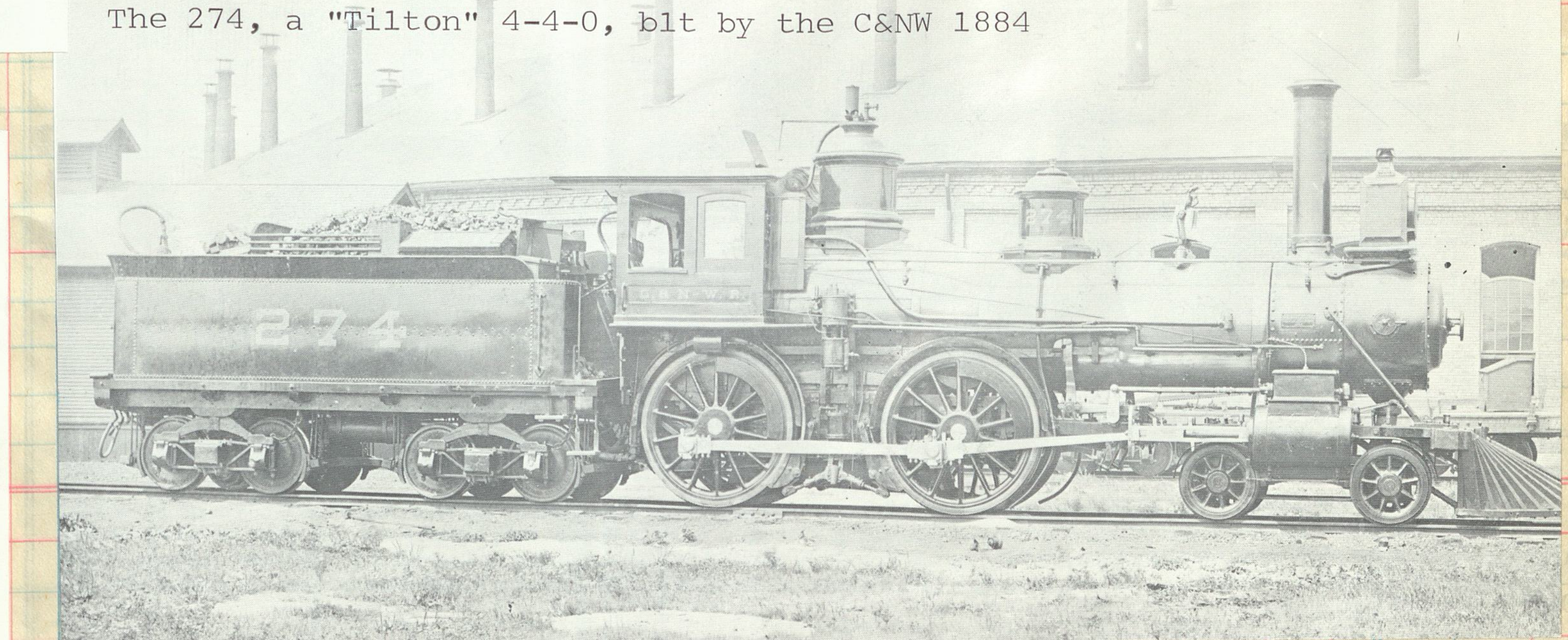
Blt by C&NW 1882



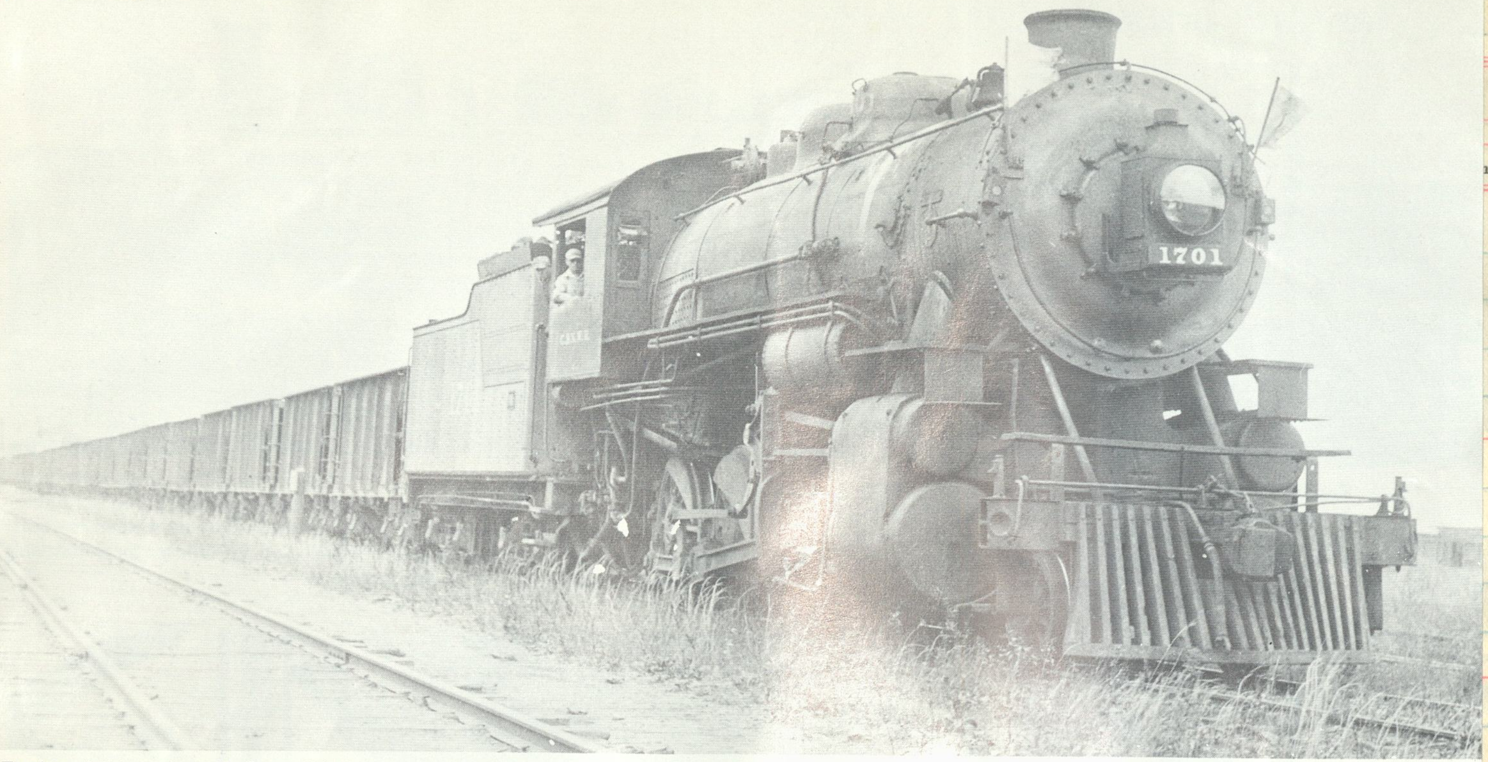
Engine 218, at Aurora, Illinois on August 24, 1926. Comparison with earlier views of these locomotives reveal little change through the years. The use of electricity resulted in a new headlight, class lights and markers, but she still has that clean unencumbered look typical of early American steam locomotives. Engine 218, a class C, American type was built by Schenectady in 1899. Photo from the collection of Robert A. Janz.



The 274, a "Tilton" 4-4-0, blt by the C&NW 1884



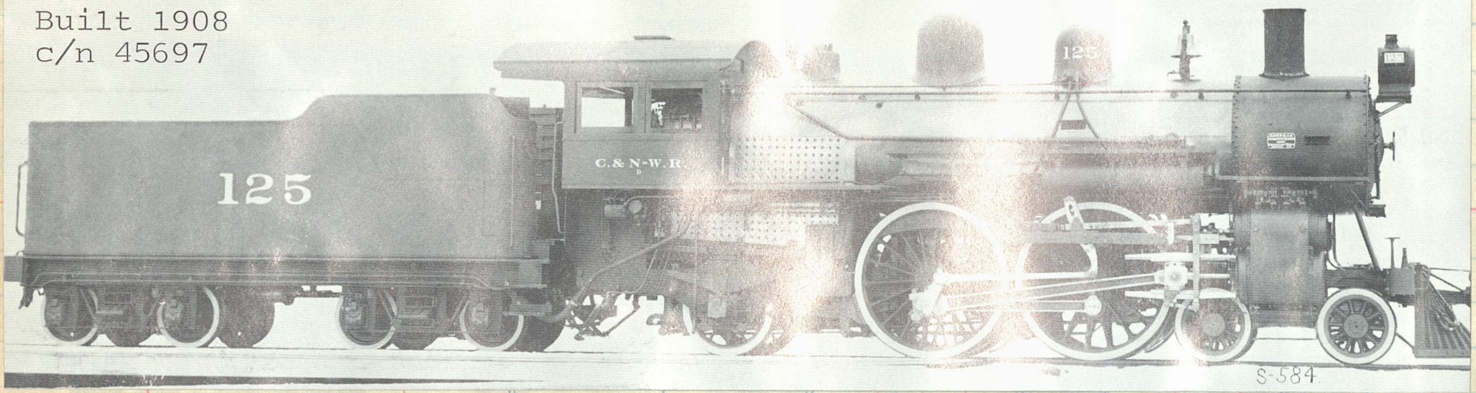
25-X



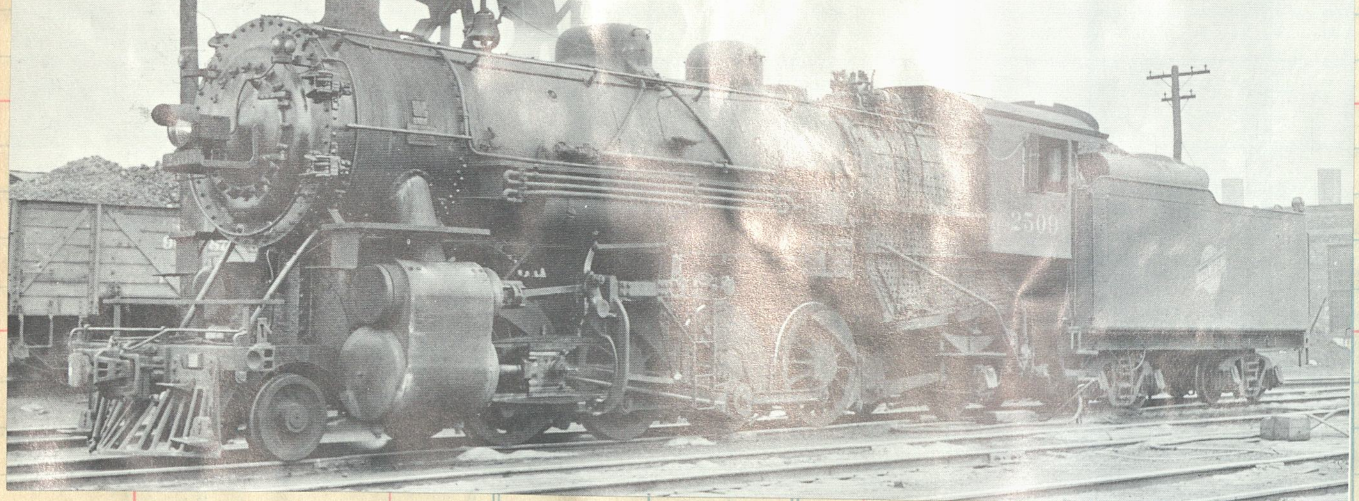
Engine 1701, a class Z, Consolidation type, was built by Baldwin in 1910. This view, although undated, reflects the appearance of these locomotives when they were new. The wooden pilot and box headlight serve to date this photo between 1910 and 1920. Class Z engines are equipped with both Walschaert and Baker valve gears, have 61-inch drivers, carry a working steam pressure [illegible]85 pounds and develop a tractive effort of 51,600 pounds. Photo from the A. W. Johnson collection.

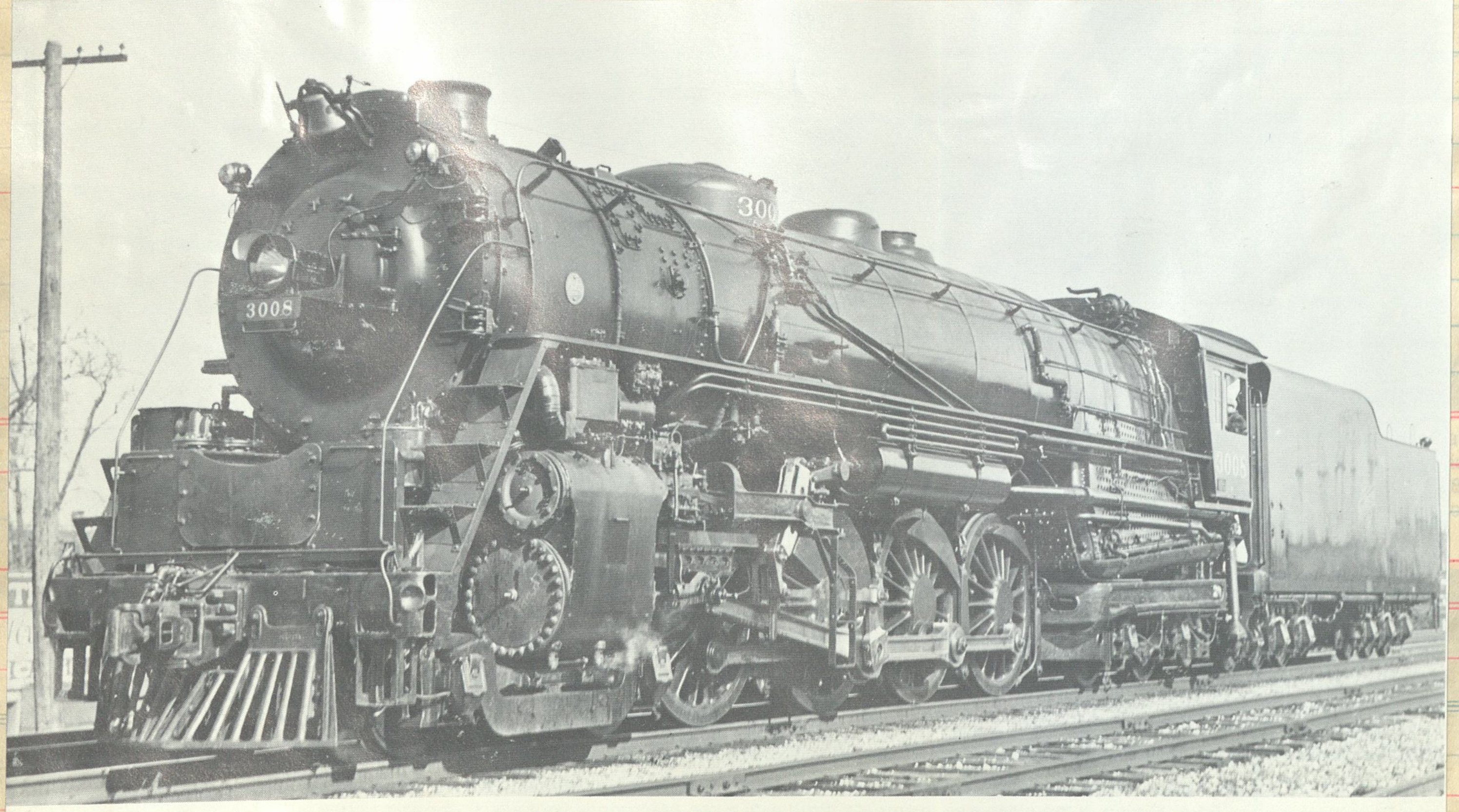
Another of those beautiful Schenectady Atlantics!

Built 1908
c/n 45697

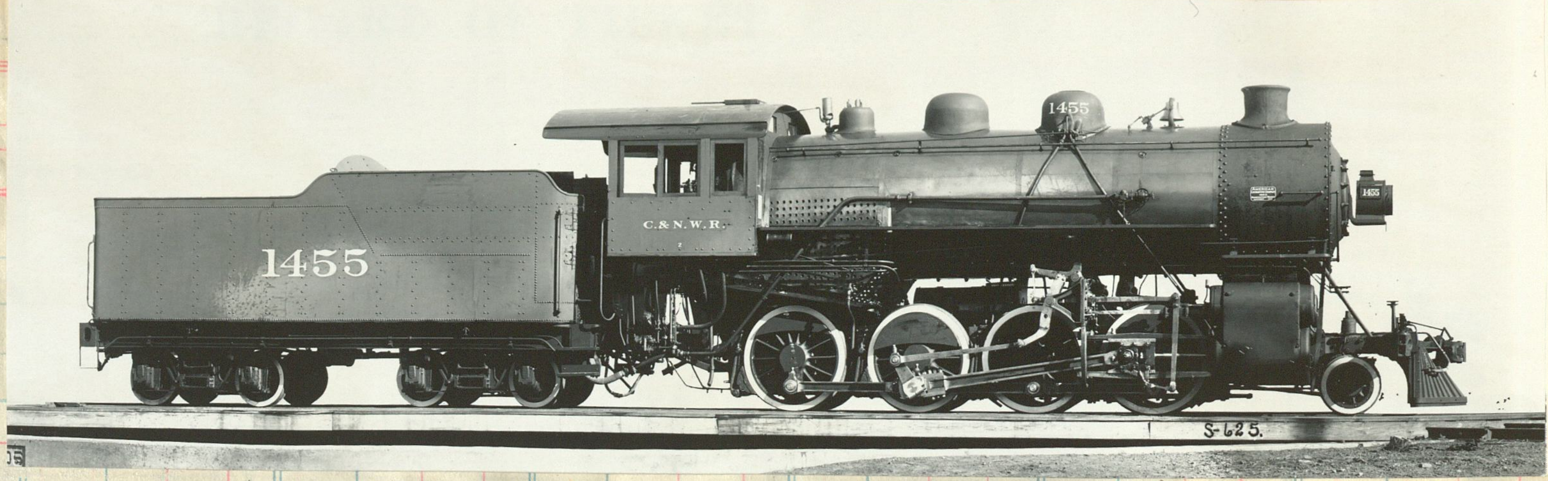


2493-2532
Richmond 1921



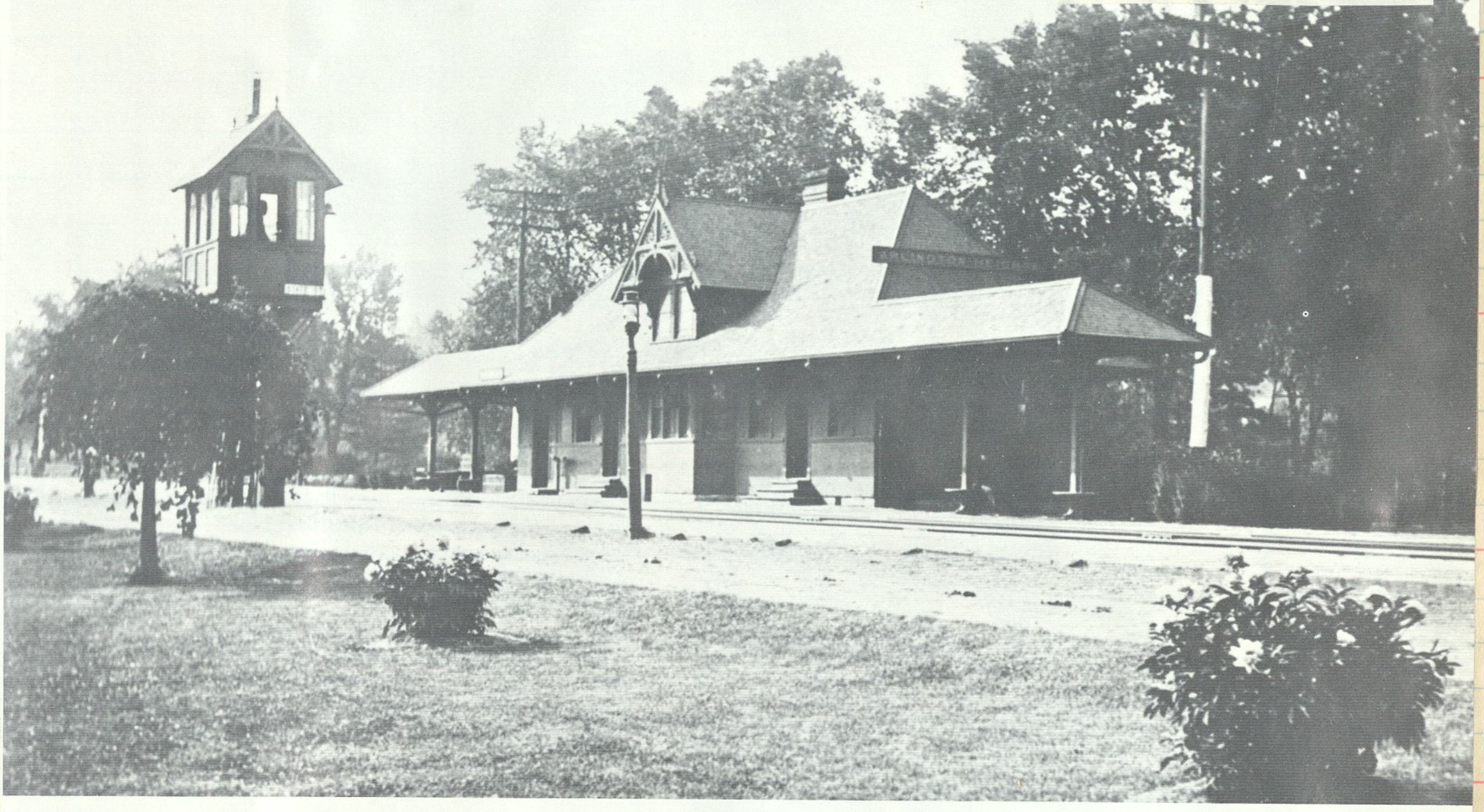


Engine 3008, a Class H, Northern type, in Chicago just after delivery during her break-in period. New locomotives were set-up at Chicago Shops and sent out on the six track main line between Kenton Avenue and Vale to be run-in along with engines fresh out of the back shops. Mechanics were stationed along the way at intervals to monitor the operation and to make necessary adjustments as the engines were limbered-up for service. Each Class H engine was fitted with cylinder and piston head covers that appeared to be either plated or polished aluminum or stainless steel. A set for this engine apparently was not ready when she was photographed. Photo by A. W. Johnson on October 27, 1929.

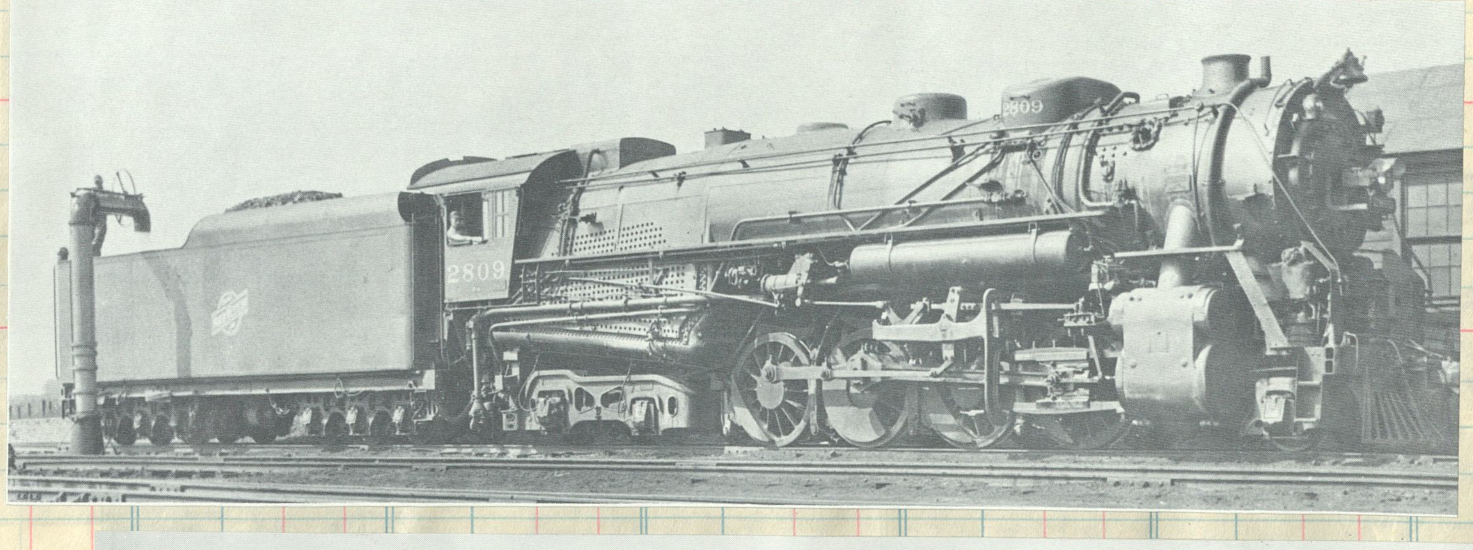


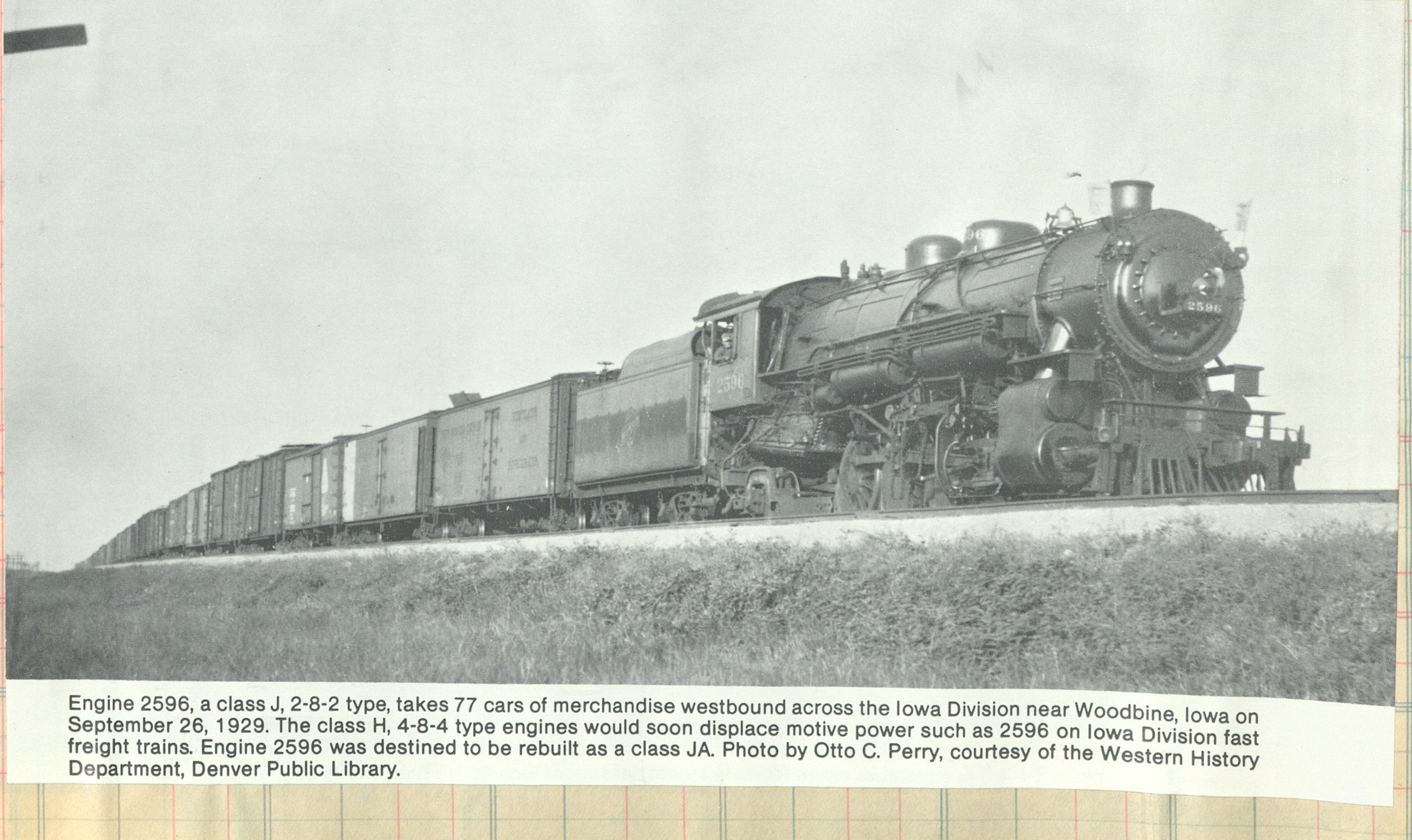
Schenectady 1909
1455-1474
c/n 46607

ARLINGTON HEIGHTS, ILL.

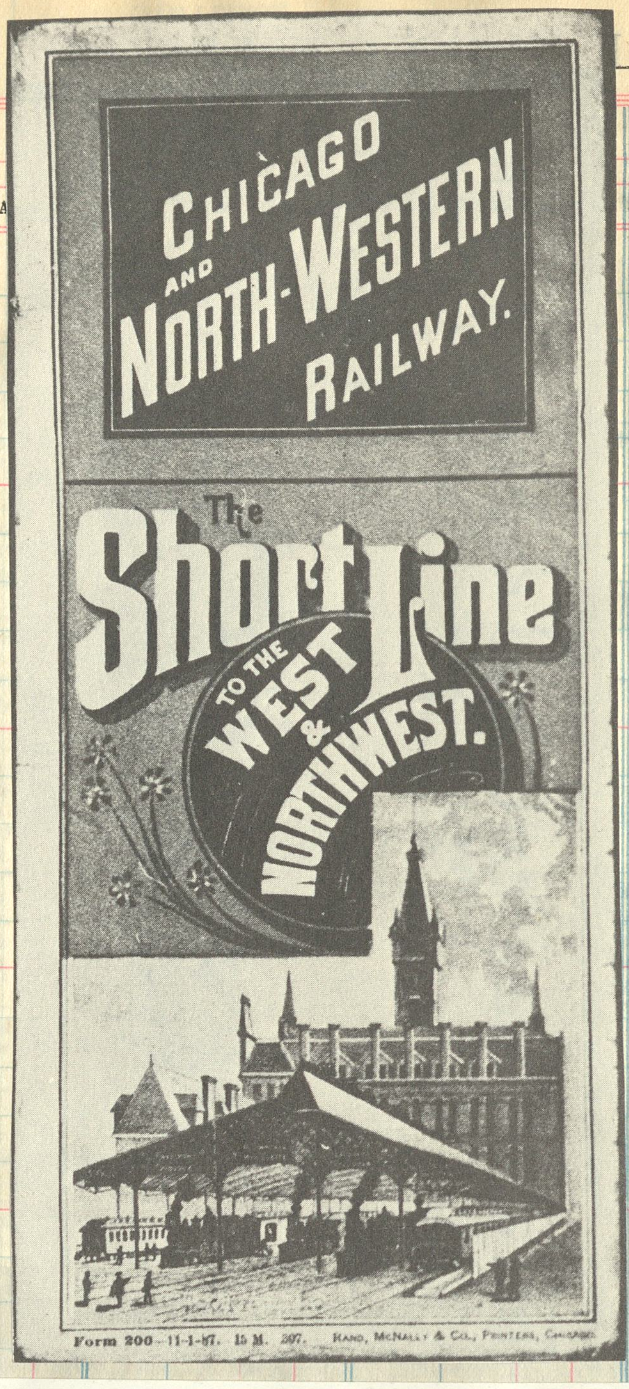


The C&NW constructed this charming depot in 1894 in the best gingerbread traditions of the past. It's companion gateman's shanty, labeled State Street, also fits into that almost forgotten era. A great deal of pride is evidenced by the appearance of the station grounds. The kerosene burning lamp mounted on the pole in the center foreground and others like it provided illumination on the platform.





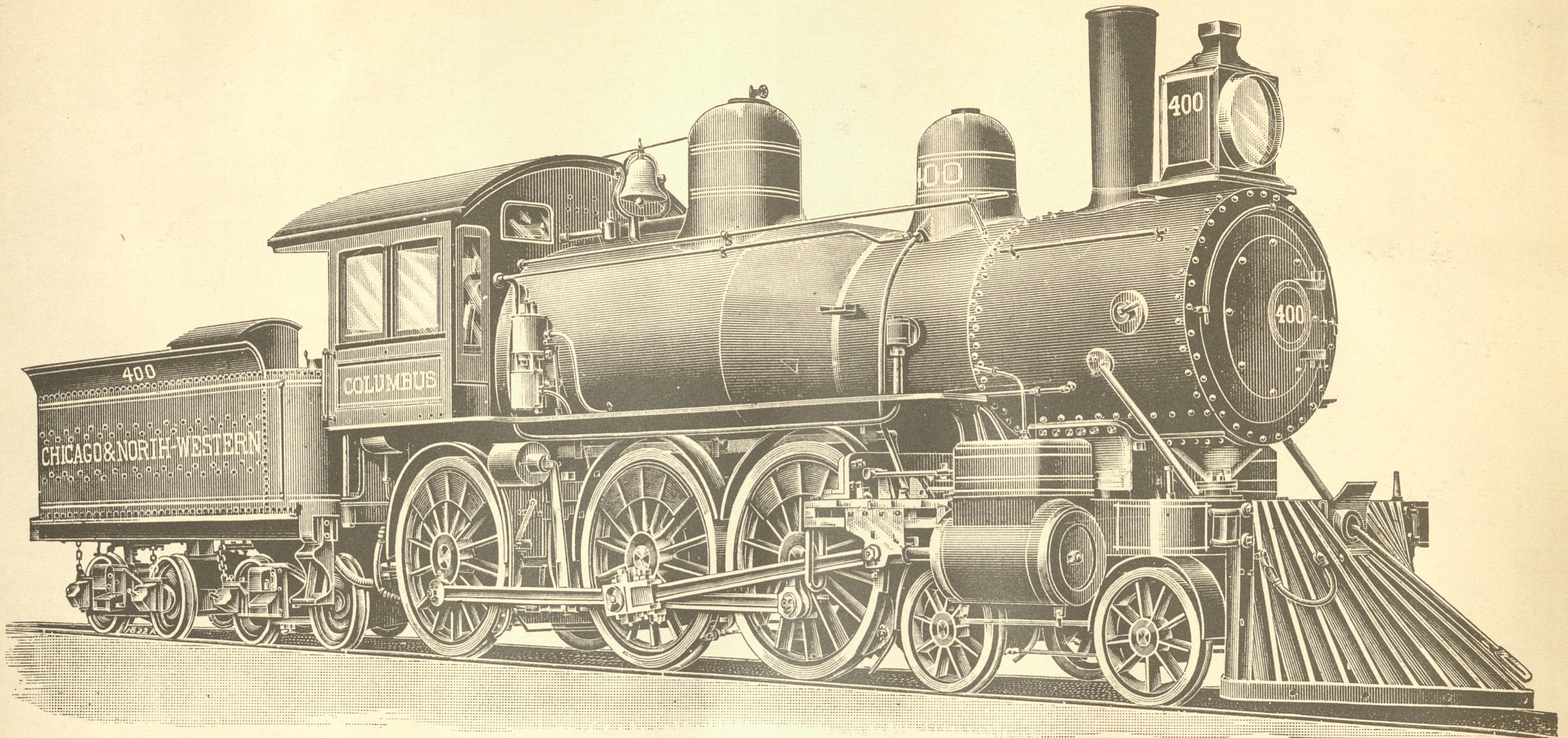
Engine 2596, a class J, 2-8-2 type, takes 77 cars of merchandise westbound across the Iowa Division near Woodbine, Iowa on September 26, 1929. The class H, 4-8-4 type engines would soon displace motive power such as 2596 on Iowa Division fast freight trains. Engine 2596 was destined to be rebuilt as a class JA. Photo by Otto C. Perry, courtesy of the Western History Department, Denver Public Library.



CHICAGO AND NORTH-WESTERN RAILWAY.

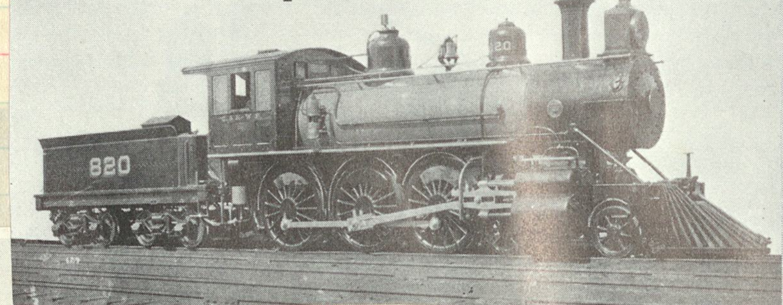
The Short Line TO THE WEST & NORTHWEST.

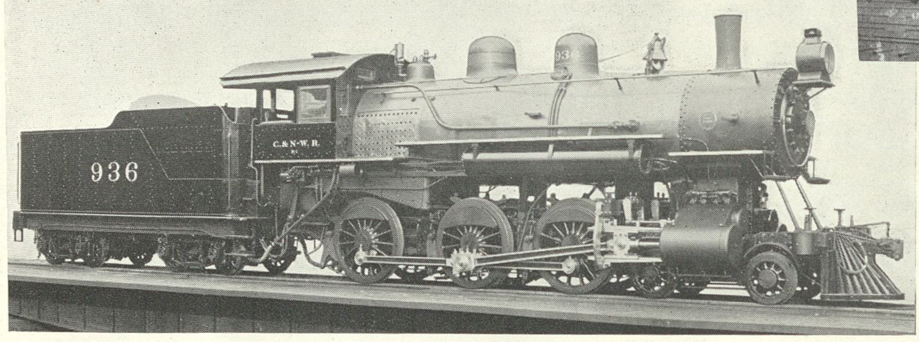
Form 200—11-1-87. 15 M. 207. Rand, McNally & Co., Printers, Chicago.



The 400 was specially built by Schenectady for exposition at the Chicago Fair in 1893
Cylinders were 19x24, drivers 69" and tractive force of 22,000# c/n 4070

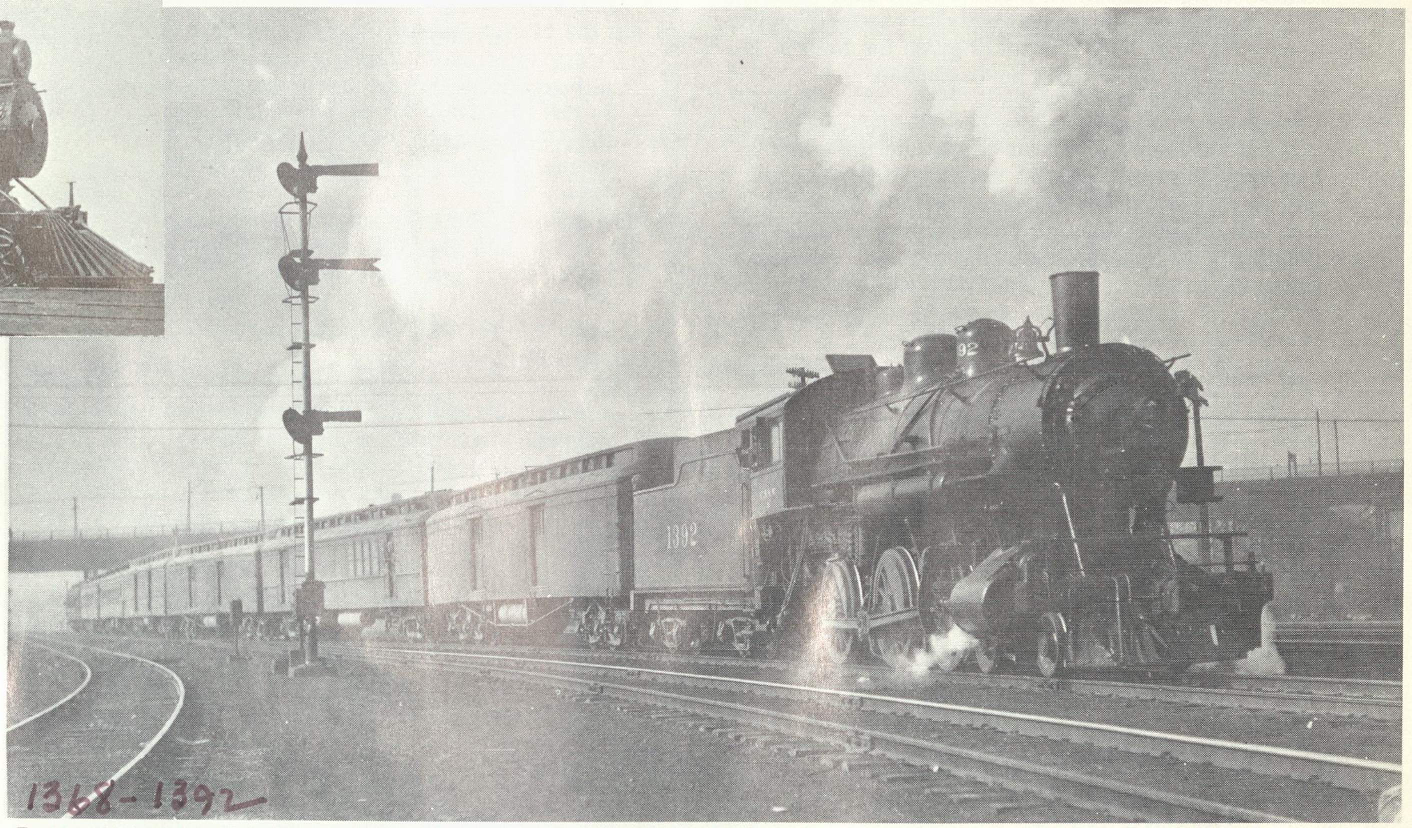
BLW 1892 cmpd





Ten-wheeled Locomotive with Wide Firebox, Class R-1, Built by The Baldwin Locomotive Works, 1907

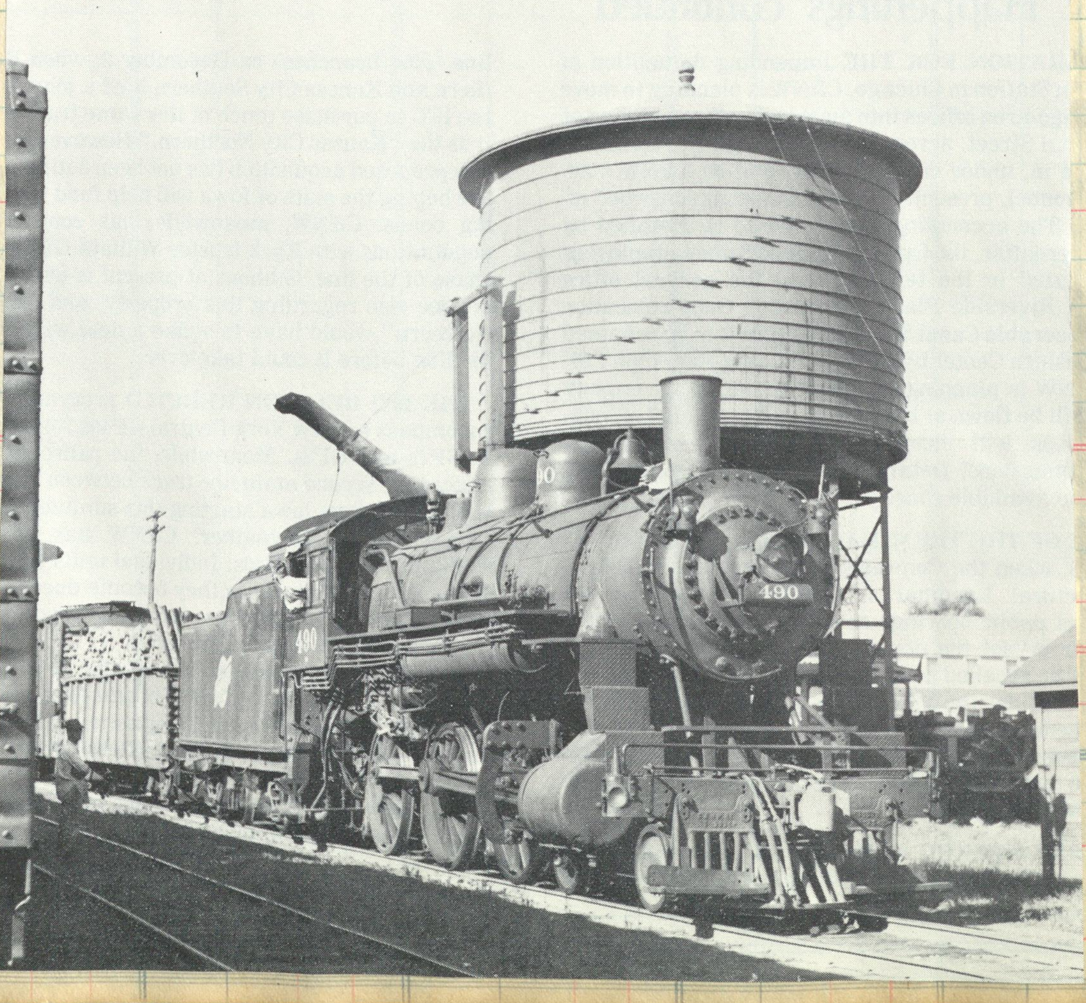
| | |
|---|---|
| Cylinders | 21″ x 26″ |
| Drivers, diam. | 63″ |
| Steam pressure | 200 lb. |
| Grate area | 46.2 sq. ft. |
| Heating surface | 2958 sq. ft. |
| Weight on drivers | 133,400 lb. |
| " total engine | 173,300 lb. |
| Tractive force | 31,000 lb. |



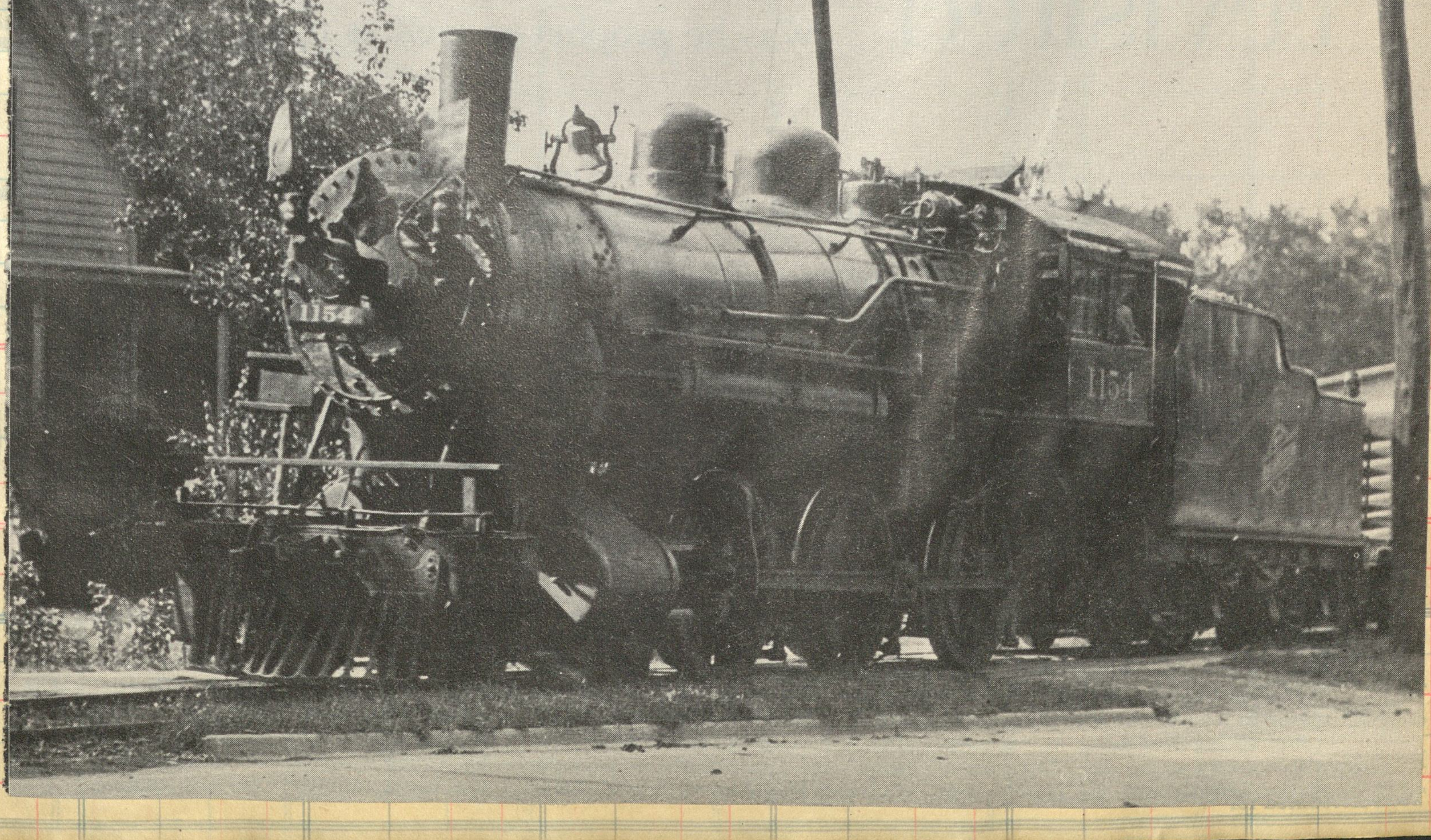
1368-1392

Engine 1392, a class R-1, Ten-wheeler, is shown here with train number 614 from Chadron, Nebraska, on February 22, 1932. Although this is a typical Chadron train, two wooden baggage cars are mixed in an otherwise all steel consist. Also, it was unusual for a 4-6-0 to handle this train. Ten-wheelers were regularly kept as stand-by power to protect the assignment in the event a Pacific type was not available. This photo by Otto Perry was taken just west of the Omaha Union Station with the 16th Street viaduct in the background. The signals are for the Union Pacific freight mainline to the left. Engine 1392 was built in March of 1907 by the Schenectady works of the American Locomotive Company. From the collection of the Denver Public Library, Western History Department.

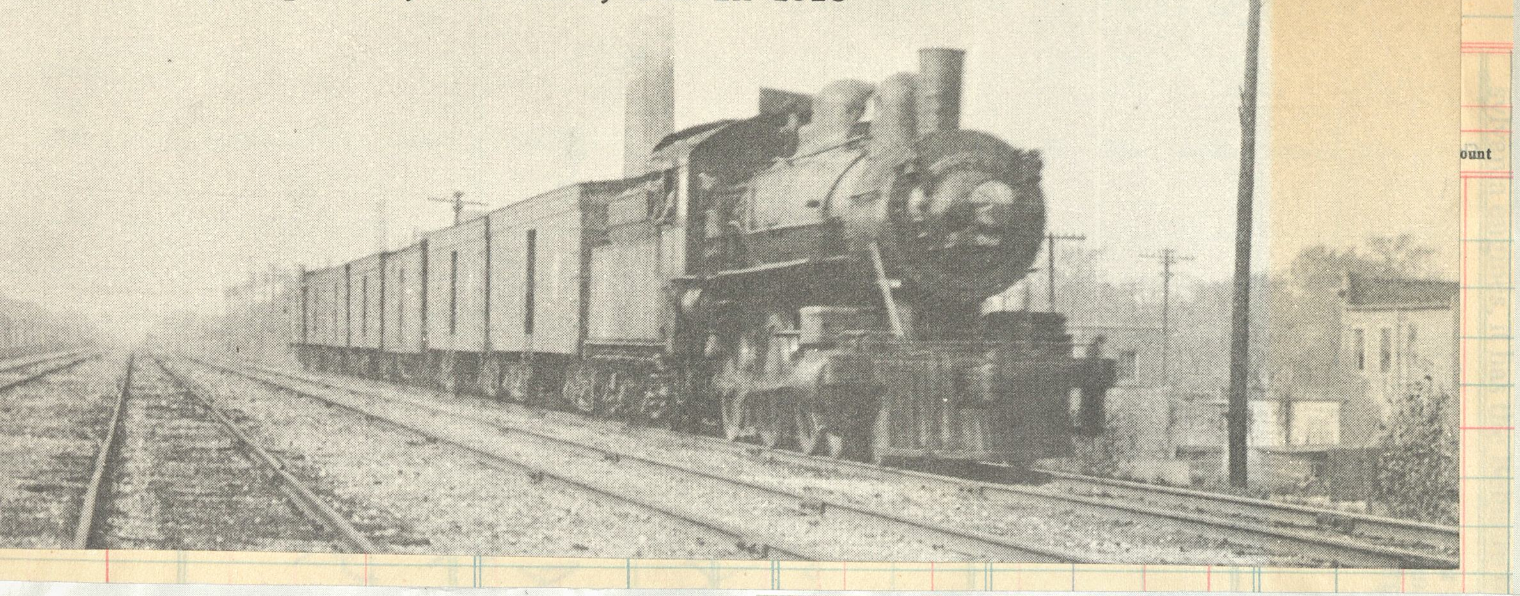
Extra 490, a R-1 Ten wheeler blt by Schenectady in 1915, at Oconto, Wis.

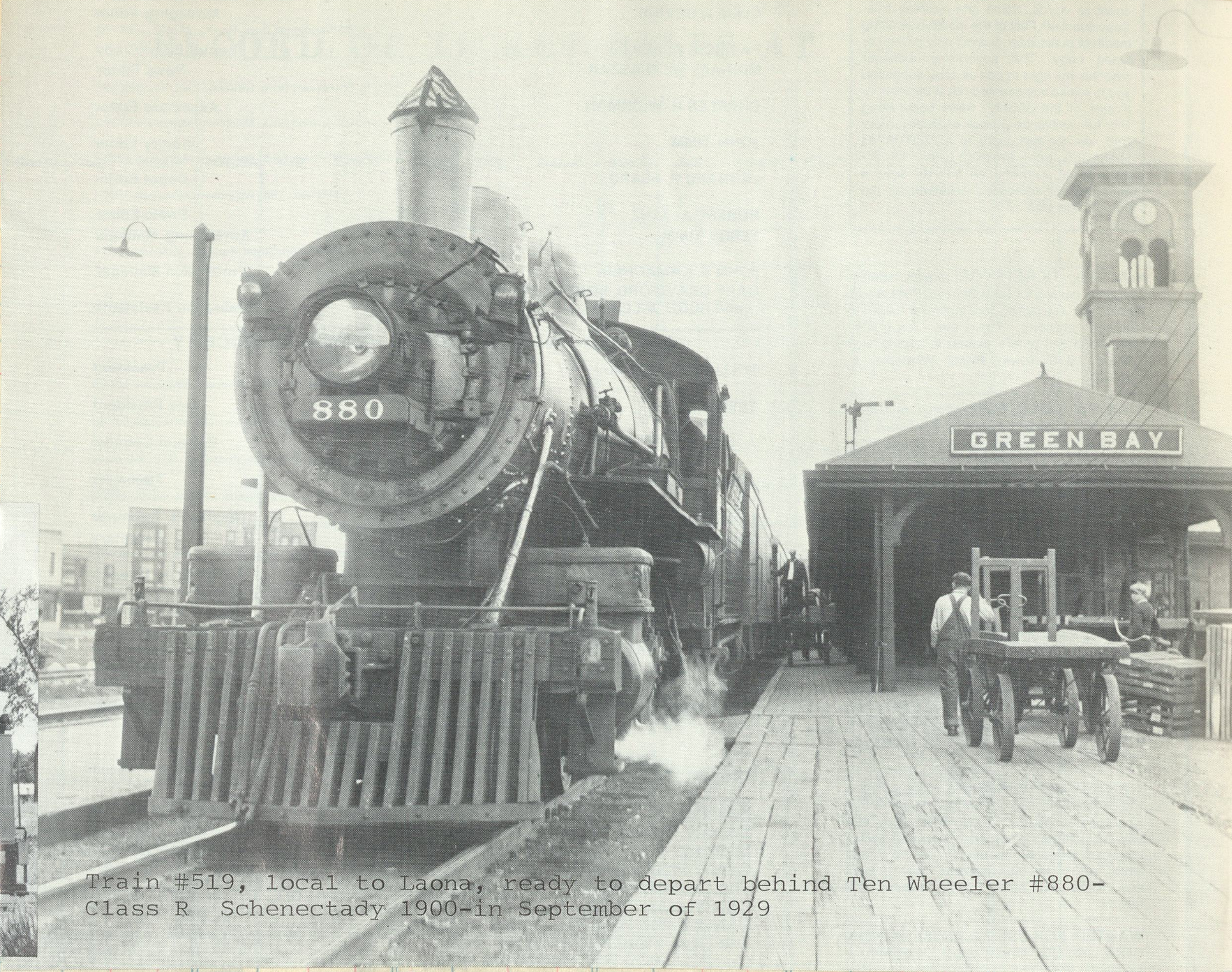


Class R-1 #1154 Baldwin 1903 c/n 23004
St Charles, Ill June 1932



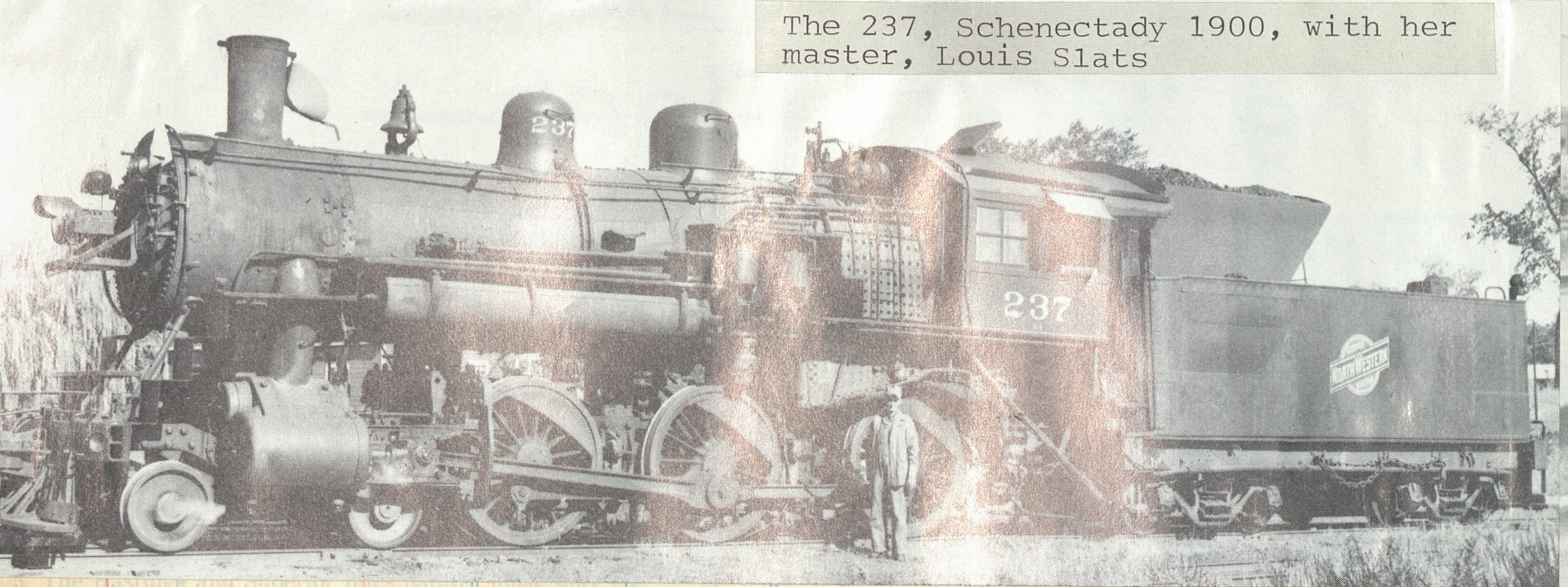
an eastbound milk train with Eng 89, class R Schenectady 1898, passing Humphrey Ave., Oak Park, Ill in 1923

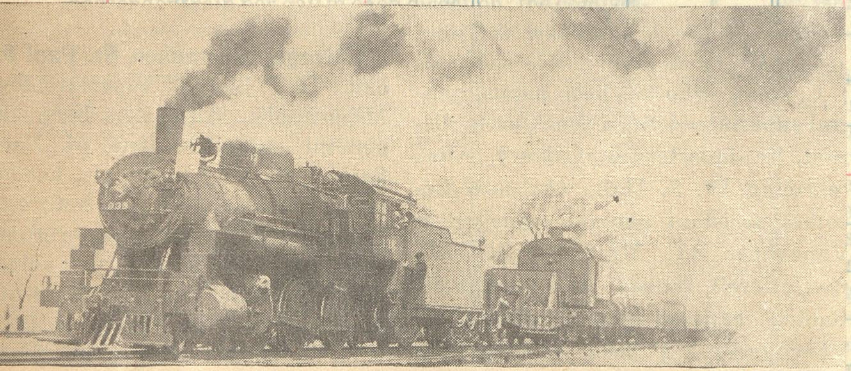



880
GREEN BAY

Train #519, local to Laona, ready to depart behind Ten Wheeler #880- Class R Schenectady 1900-in September of 1929

The 237, Schenectady 1900, with her master, Louis Slats

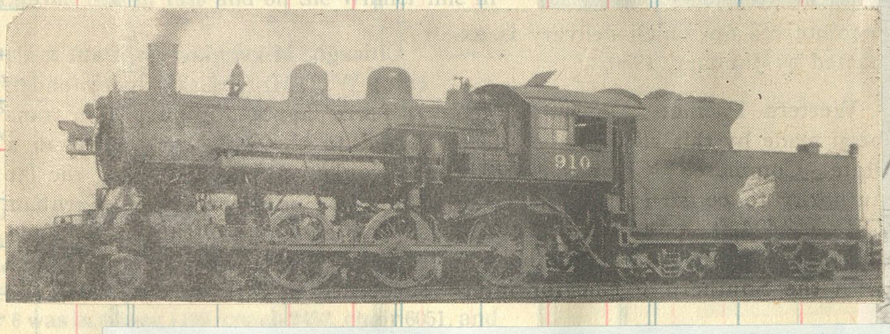




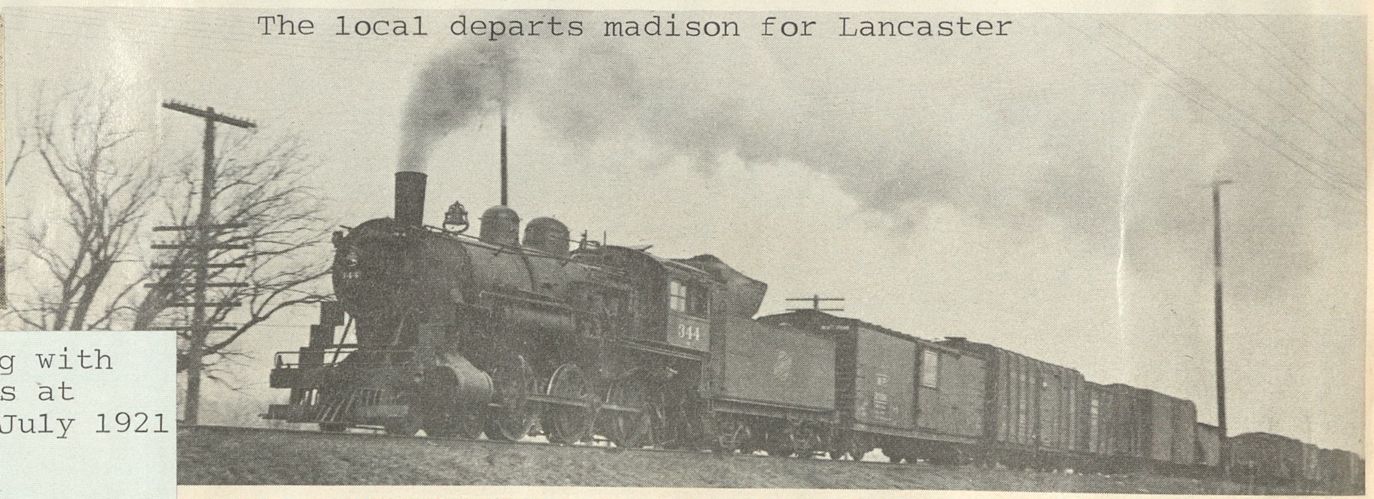
A CHICAGO & NORTH WESTERN WRECKING TRAIN

Locomotive 938 is hauling this wrecking outfit.

D. E. Griffit

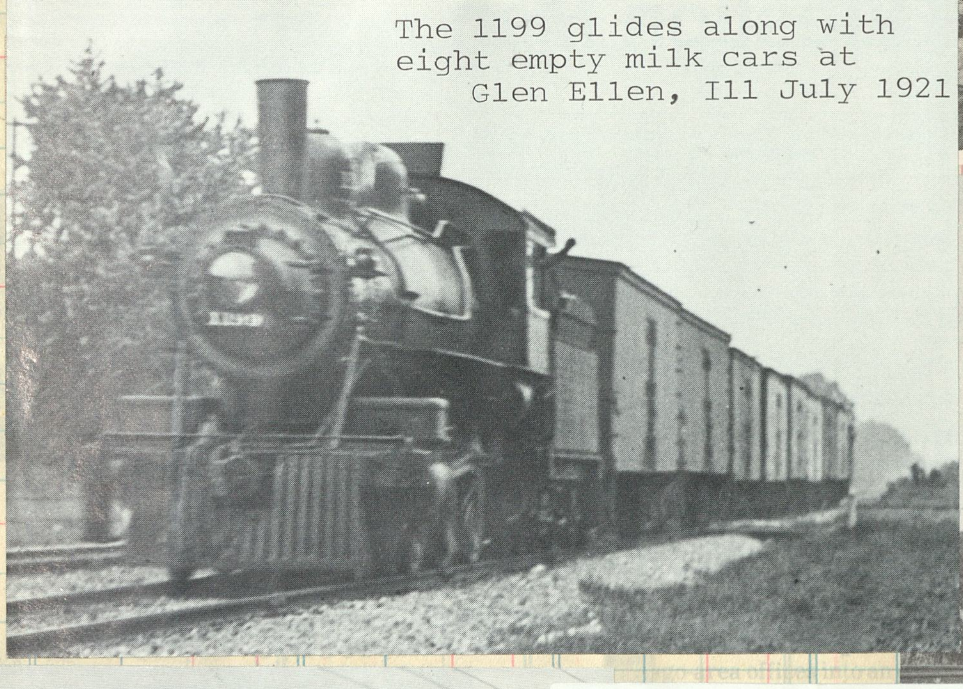


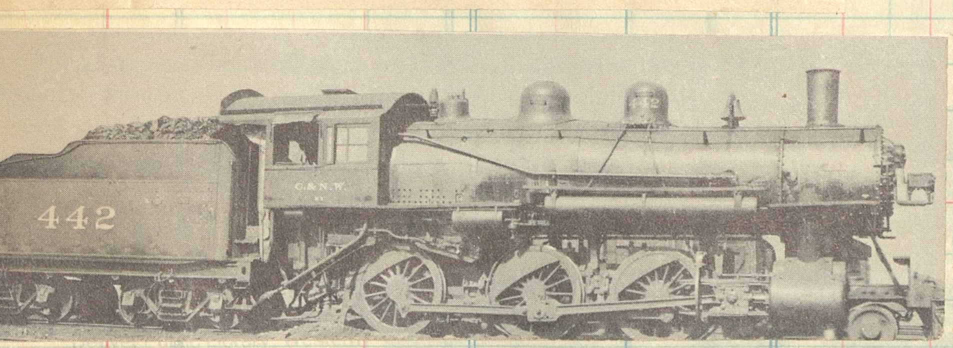
The local departs madison for Lancaster

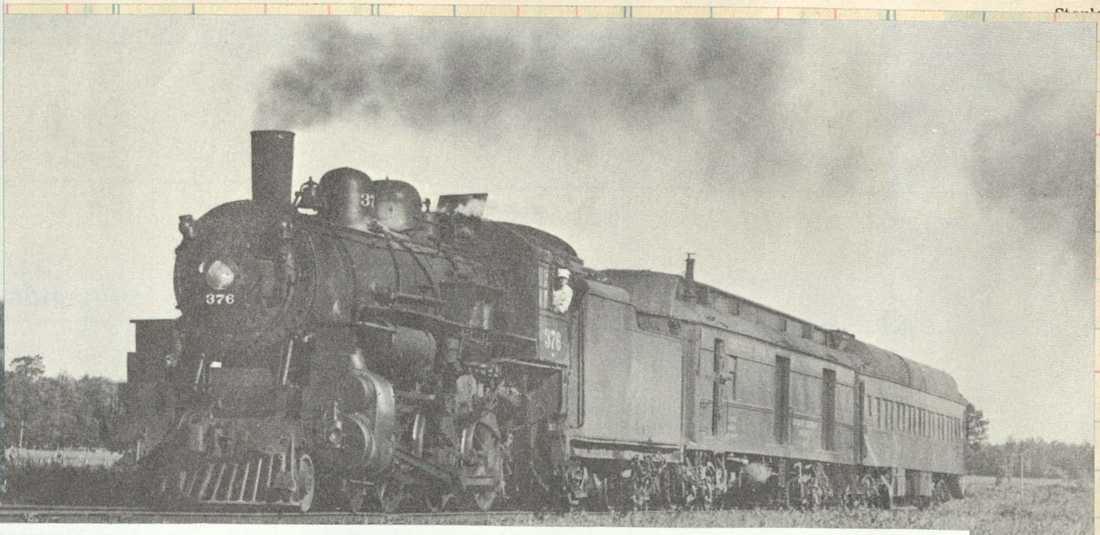


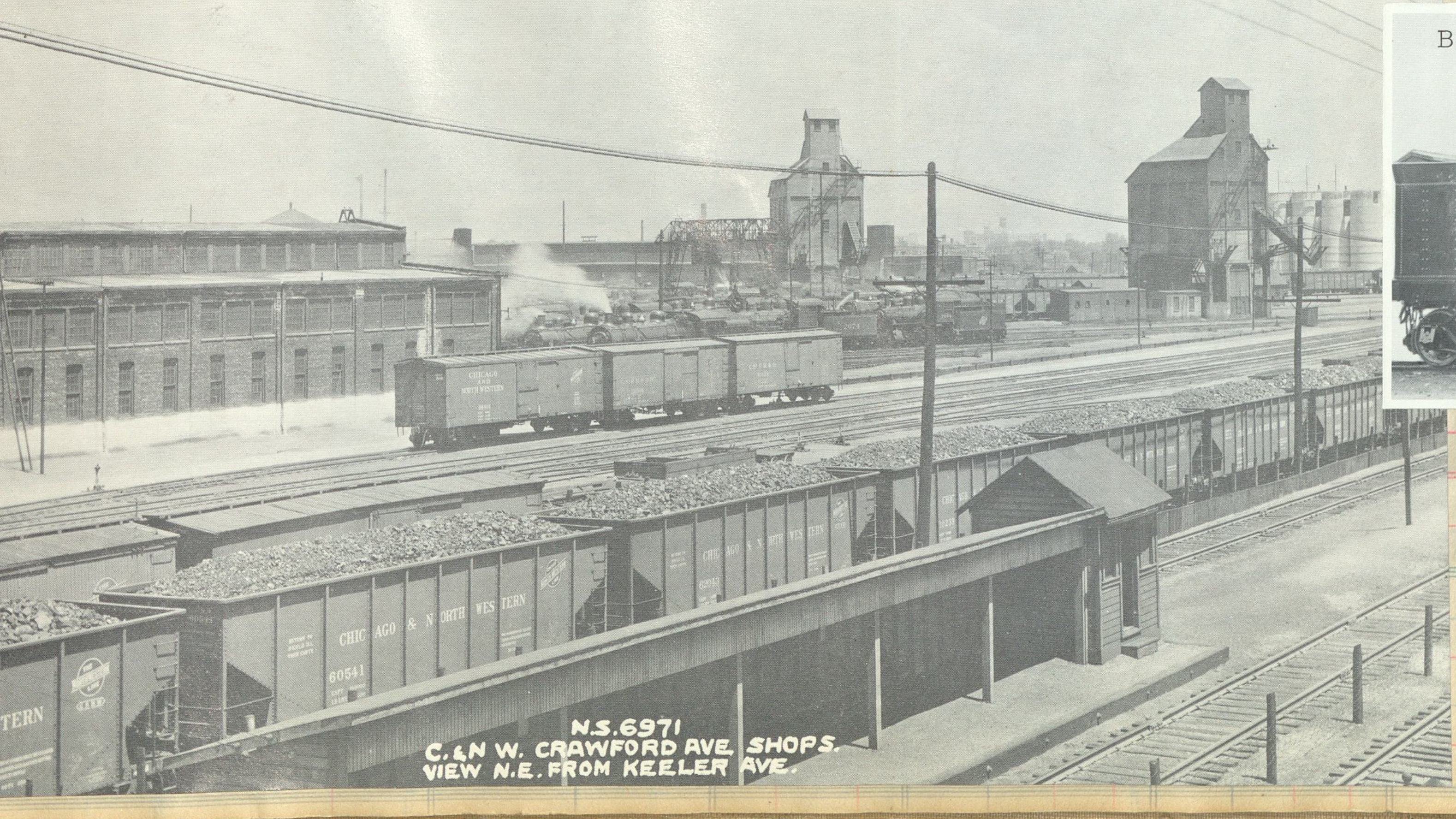
Stanley H. Mail

The 1199 glides along with eight empty milk cars at Glen Ellen, Ill July 1921



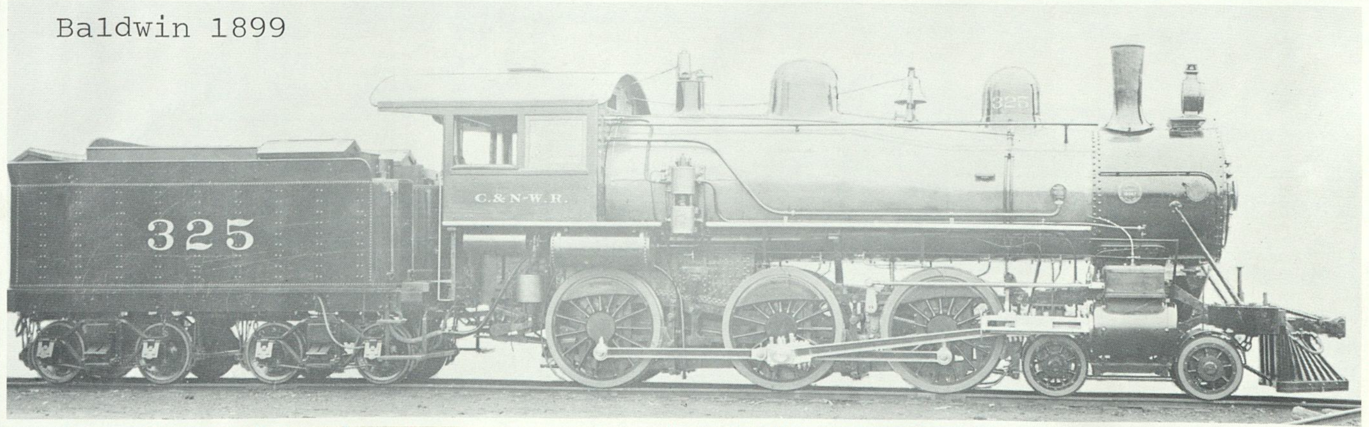





CHICAGO & NORTH WESTERN

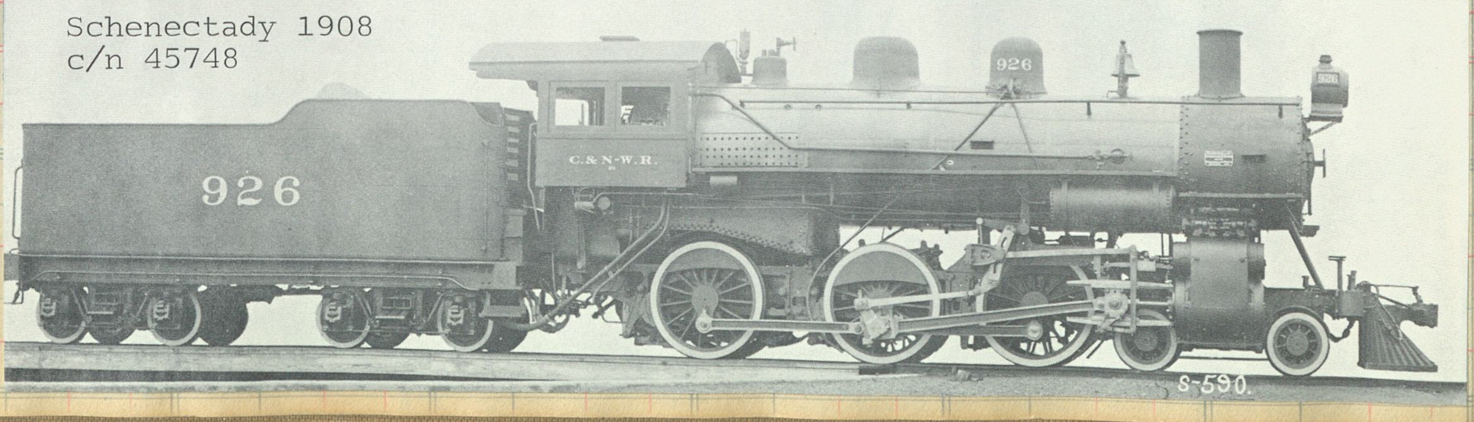
N.S.6971
C.&N.W. CRAWFORD AVE. SHOPS.
VIEW N.E. FROM KEELER AVE.

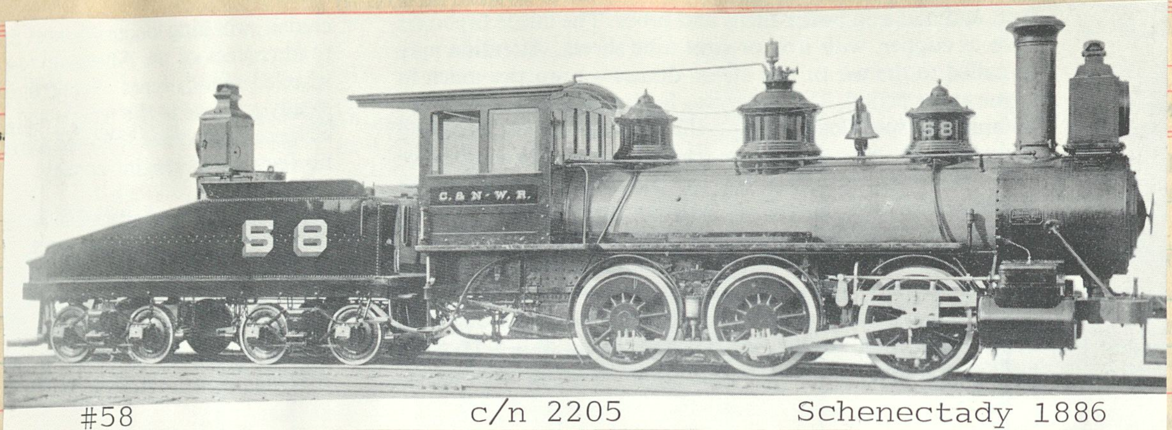
Baldwin 1899



Marshfield

Schenectady 1908
c/n 45748

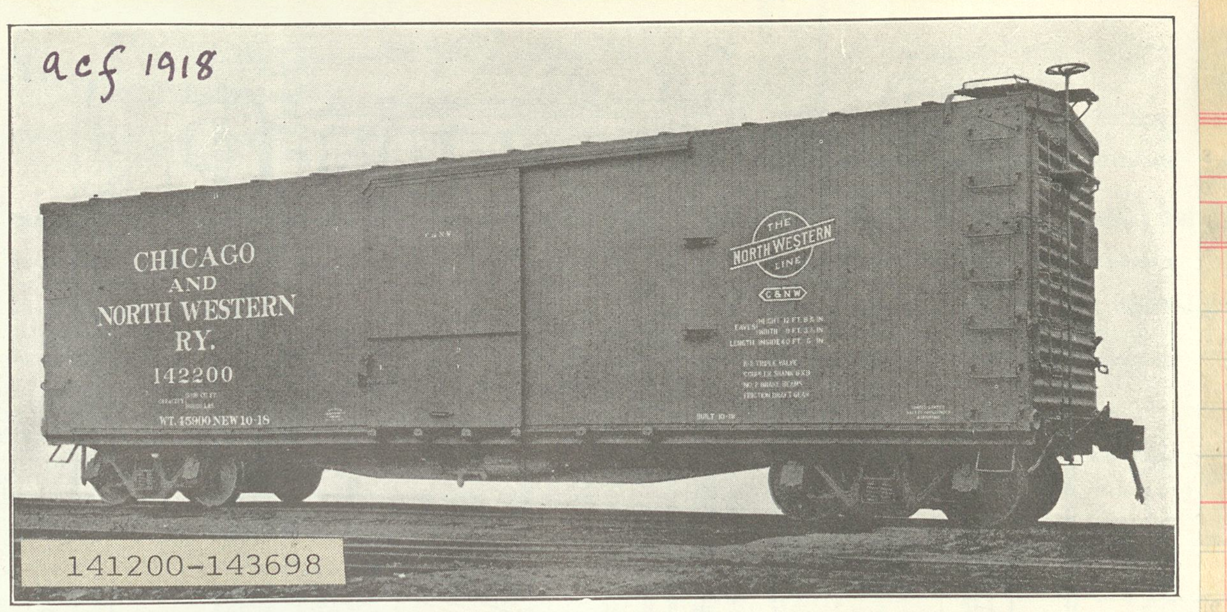

926
C.&N.W.R.
926
S-590.



#58 c/n 2205 Schenectady 1886

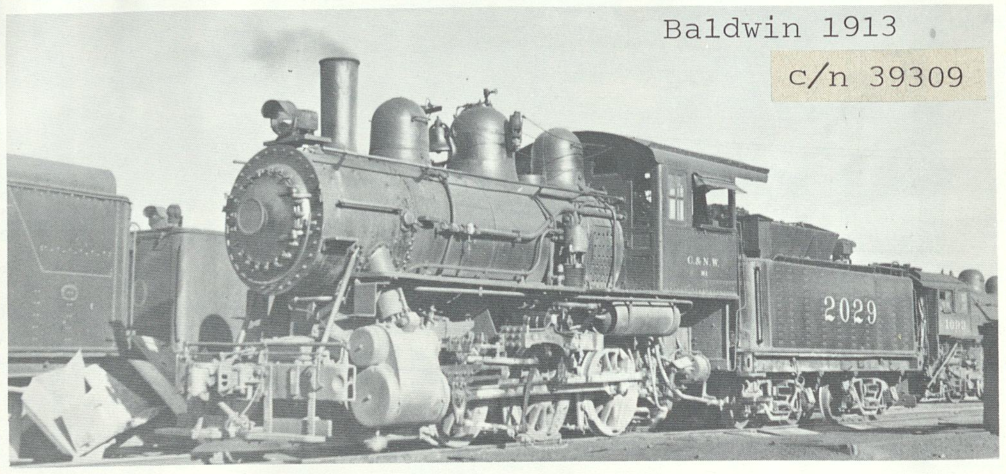
A Lightning Slinger, His Train-Order Hoop, and His Board. (Posed by M. E. Schaeffer, C&NW Agt.-Opr. at Shawnee, Wyo.)

acf 1918



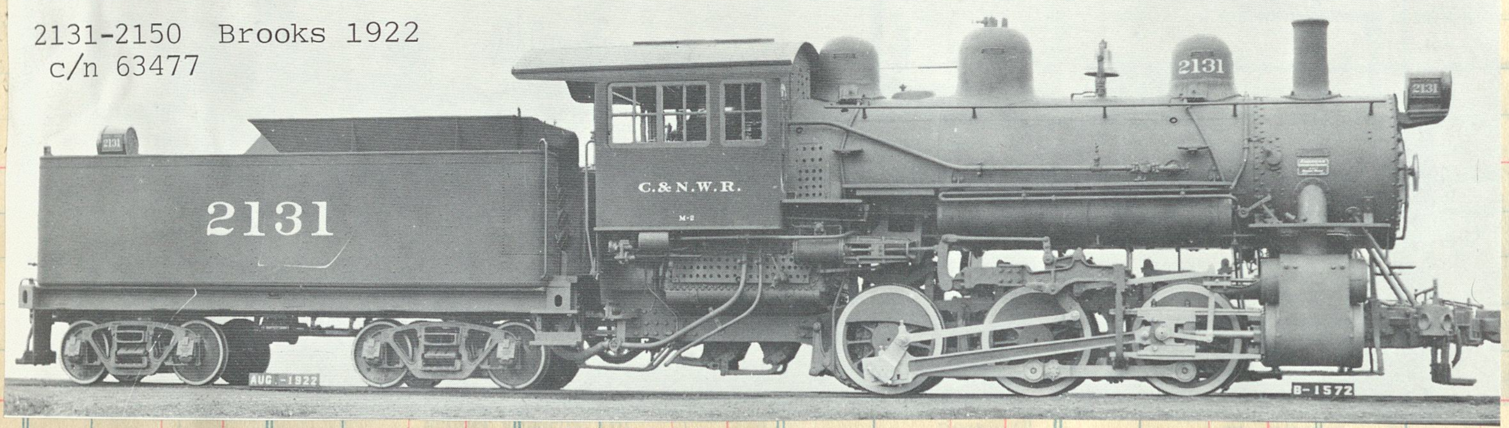
141200-143698

g. 11—U. S. R. A. Standard Steel Underframe Double Sheathed 40-Ton Box Car. Assigned to the Chic and North Western. Builder, American Car and Foundry Company.



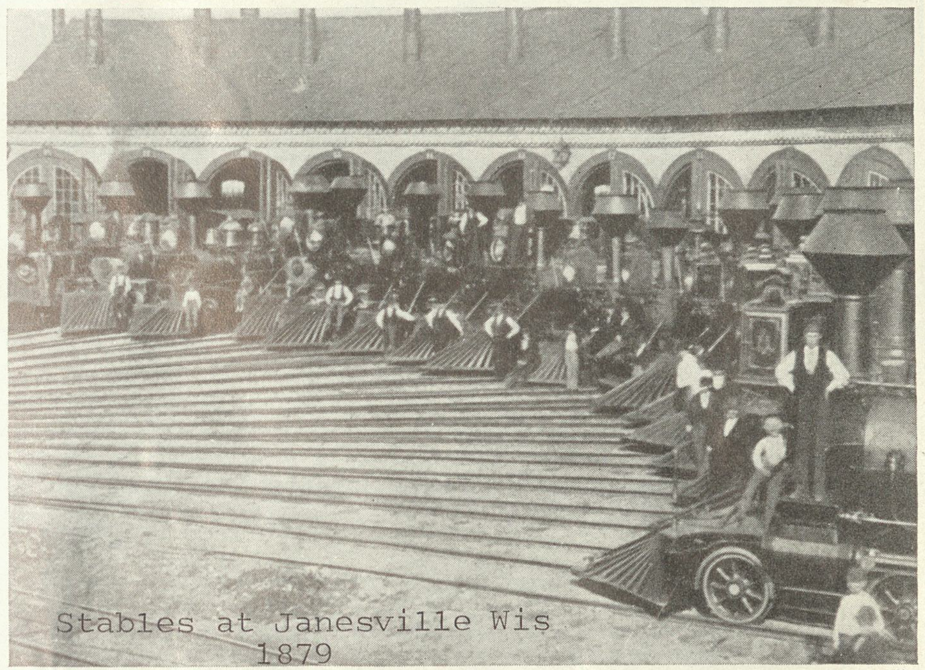
Baldwin 1913

c/n 39309



2131-2150 Brooks 1922
c/n 63477

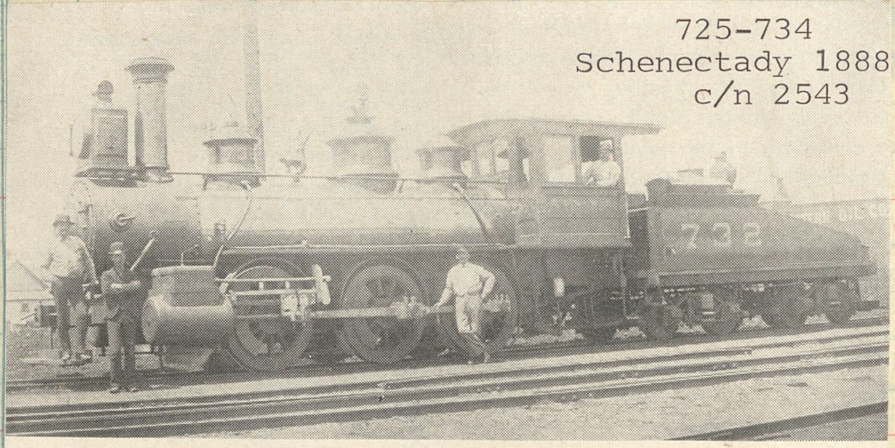
A Class J Mikado Type Locomotive Handling a Tonnage Train



Stables at Janesville Wis
1879

Collection of Mark Richardson, Milton Junction, Wis.

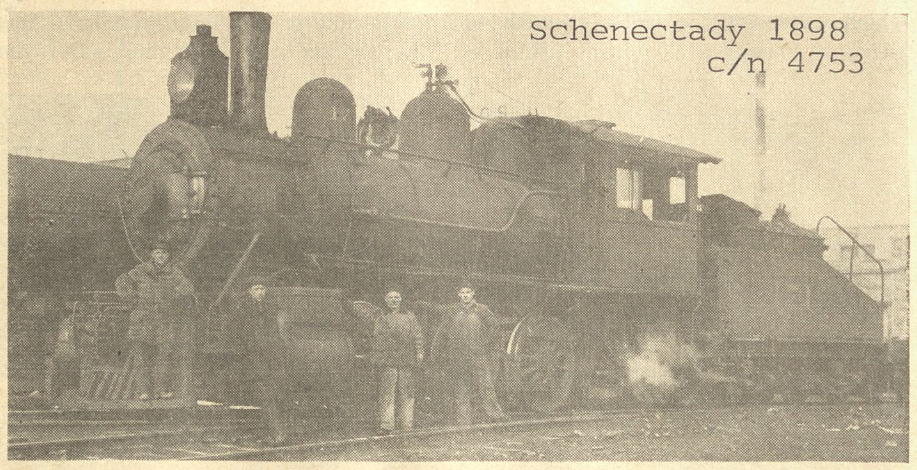
725-734
Schenectady 1888
c/n 2543



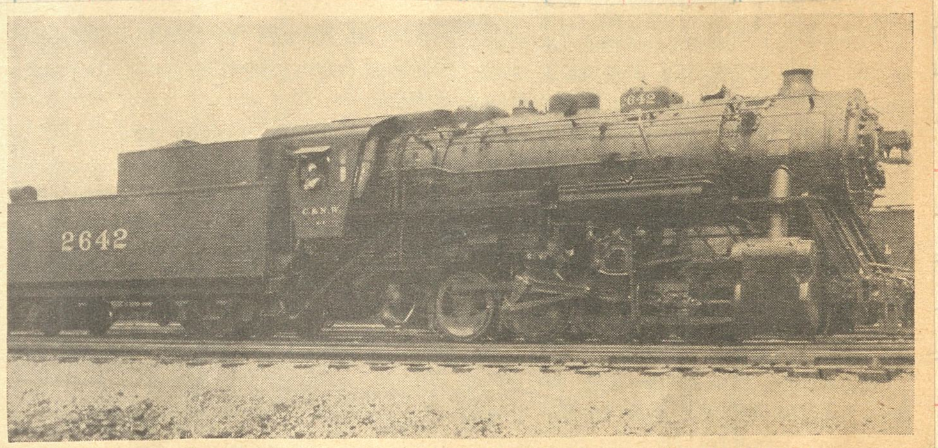
"SCHUSTER-MANNED" SWITCH ENGINE

The Chicago & North Western switch engine (number 732) is shown above in a Milwaukee, Wis., yard. M. A. Schuster, in cab, was engineer, while his brother, Joe Schuster, fired. Switchman is Ed Hughes. Picture was taken in 1887 and submitted by recently retired Brother W. F. Schuster.

Schenectady 1898
c/n 4753



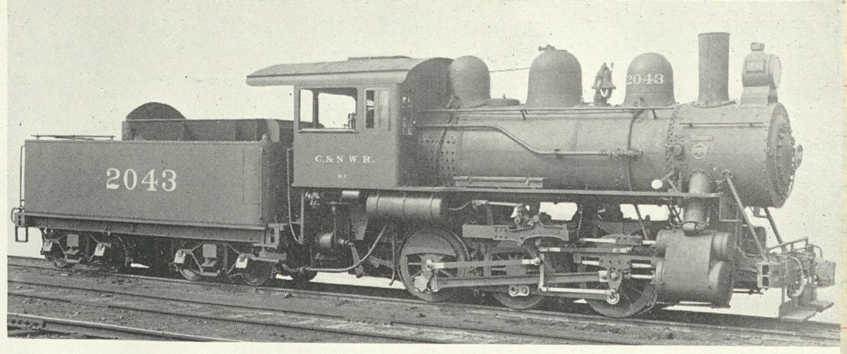
OLD CHICAGO & NORTH WESTERN ENGINE 171 IN 1909



CHICAGO & NORTH WESTERN'S HEAVY-DUTY SWITCH ENGINE 2642

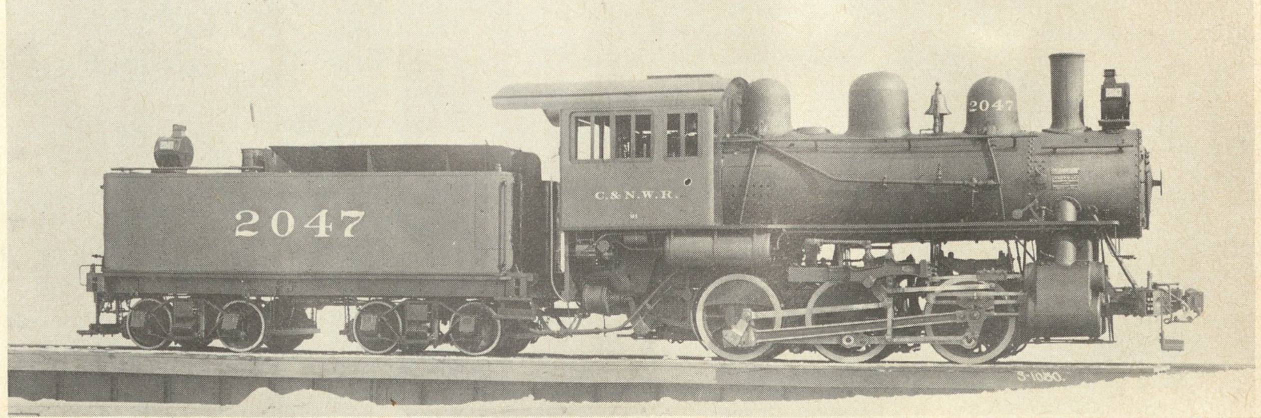
| | |
|---|---|
| Cylinders | 18″ x 24″ |
| Drivers, diam. | 51″ |
| Steam pressure | 180 lb. |
| Grate area | 21.8 sq. ft. |
| Water heating surface | 1037 sq. ft. |
| Superheating surface | 206 sq. ft. |
| Weight, total engine | 129,800 lb. |
| Tractive force | 23,400 lb. |

c/n 39370



Six-coupled Switching Locomotive with Superheater, Class M-1, Built by The Baldwin Locomotive Works, 1913

2044-2061 c/n 54488 Schenectady 1914



2151-2160
Schenectady 1916
c/n 55531

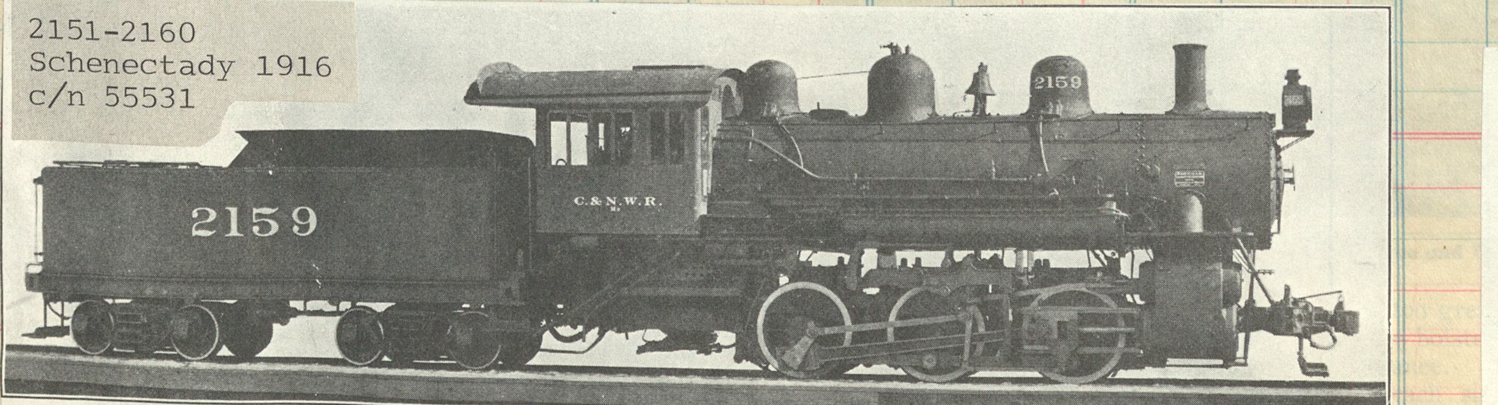


Fig. 30—Six-Wheel (0-6-0) Locomotive for Switching Service. Built for Chicago & North Western by the American Locomotive Company.

| | |
|---|---|
| Gage | 4 ft. 8½ in. |
| Cylinders | 21 in. x 28 in. |
| Steam Pressure | 180 lbs. |
| Diam. of Drivers | 51 in. |
| Tractive Effort | 37,000 lbs. |
| Rigid Wheel Base | 11 ft. 6 in. |
| Total Wheel Base | 11 ft. 6 in. |
| Heating Surface, Tubes | 1,825 sq. ft. |
| Heating Surface, Firebox | 152 sq. ft. |
| Heating Surface, Total | 1,977 sq. ft. |
| Heating Surface, Superheater | 402 sq. ft. |
| Grate Area | 32.7 sq. ft. |
| Weight on Drivers | 171,000 lbs. |
| Fuel | Soft coal |

2636-2643
Richmond 1927
c/n 67388

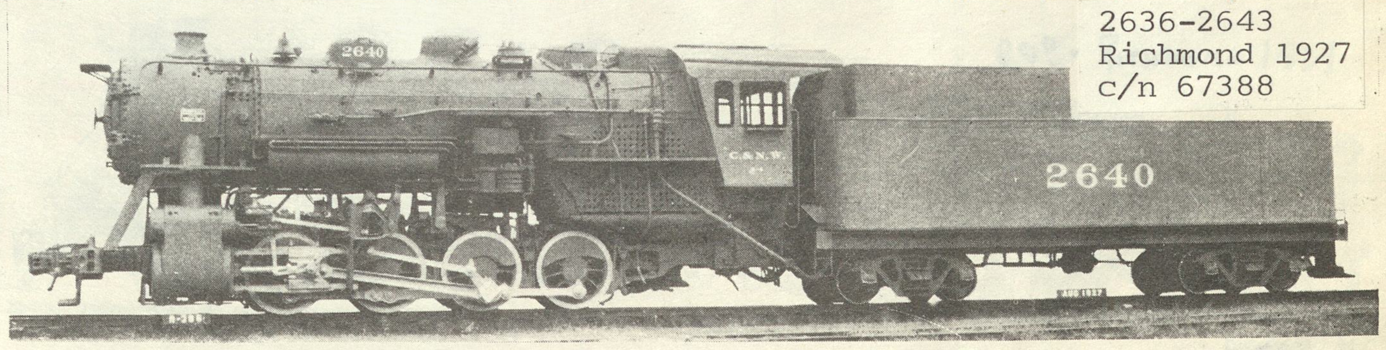
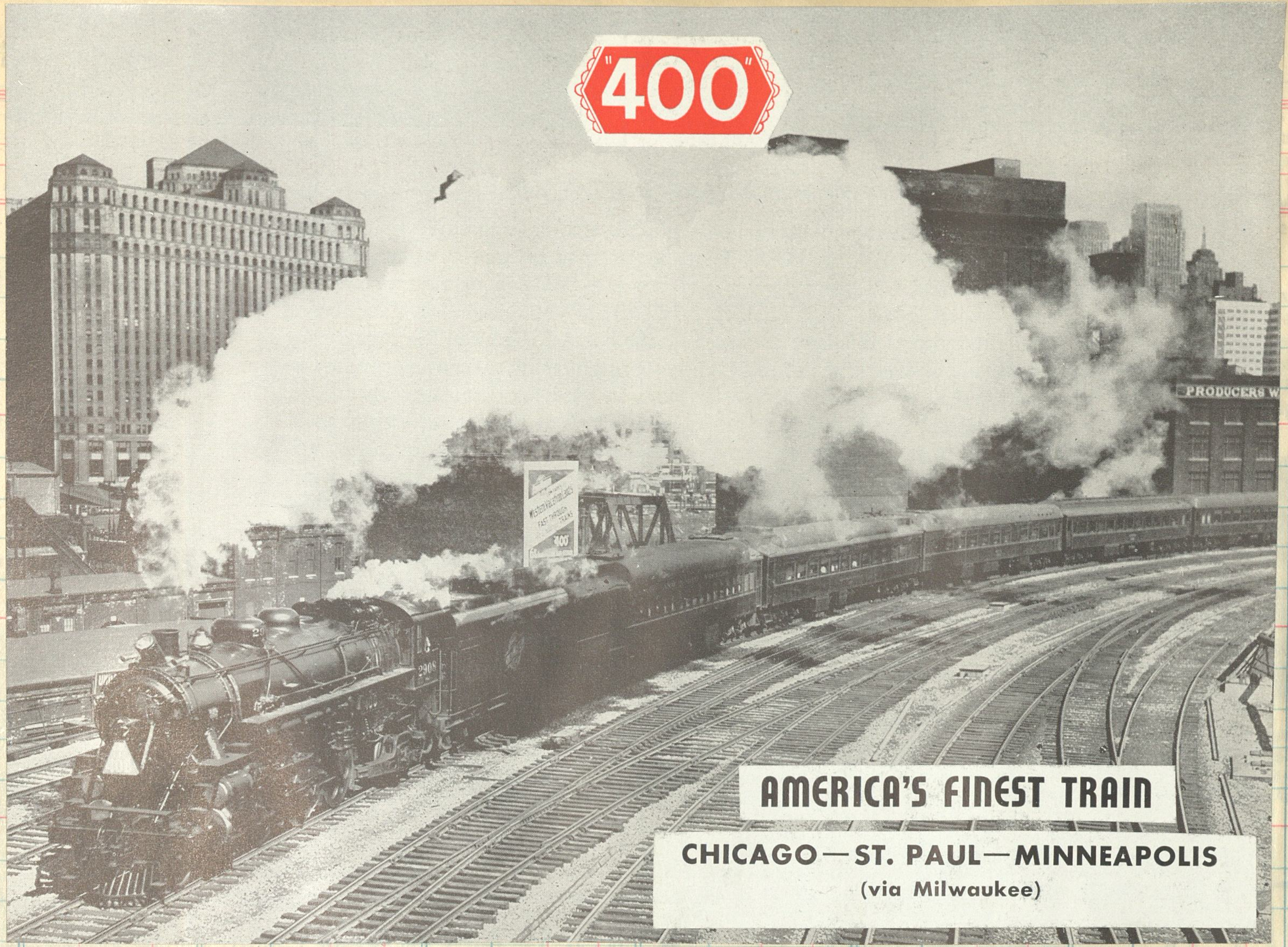


Fig. 31—Chicago & North Western 0-8-0 (Eight-Wheel) Switching Locomotive. Built by the American Locomotive Company.

| | |
|---|---|
| Cylinders, diameter and stroke | 25 in. x 28 in. |
| Tractive force | 54.000 lb. |
| Cylinder horsepower (Cole) | 2.083 hp. |
| Drivers, diameter | 51 in. |
| Weight on drivers | 231.000 lb. |
| Driving wheel base | 15 ft. 0 in. |
| Fuel | Soft coal |
| Grate area | 47 sq. ft. |
| Steam pressure | 185 lb. |
| Evaporative heating surface | 2,478 sq. ft. |
| Superheating surface | 652 sq. ft. |
| Tender capacity | 12,000 gal., 16 tons |



**AMERICA'S FINEST TRAIN**

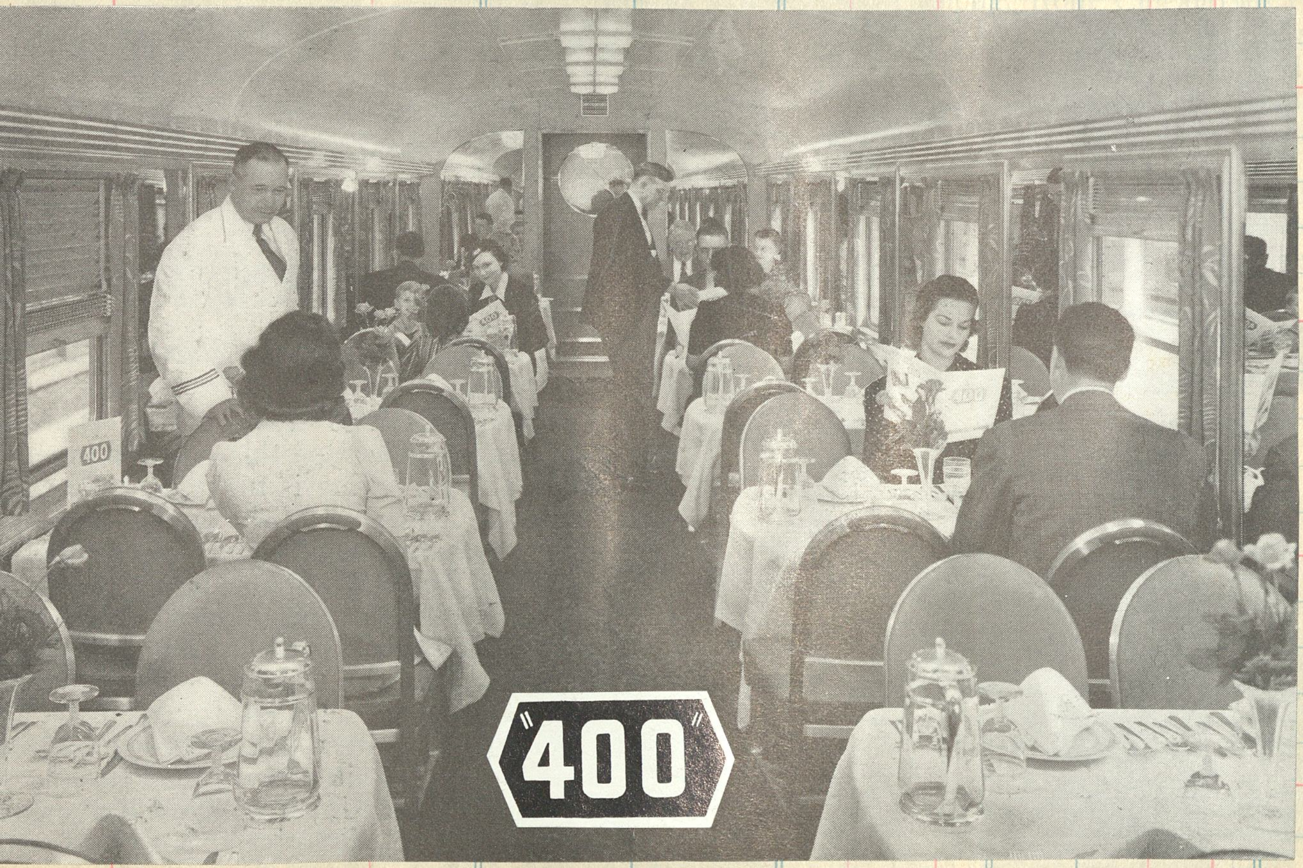
**CHICAGO—ST. PAUL—MINNEAPOLIS**
(via Milwaukee)

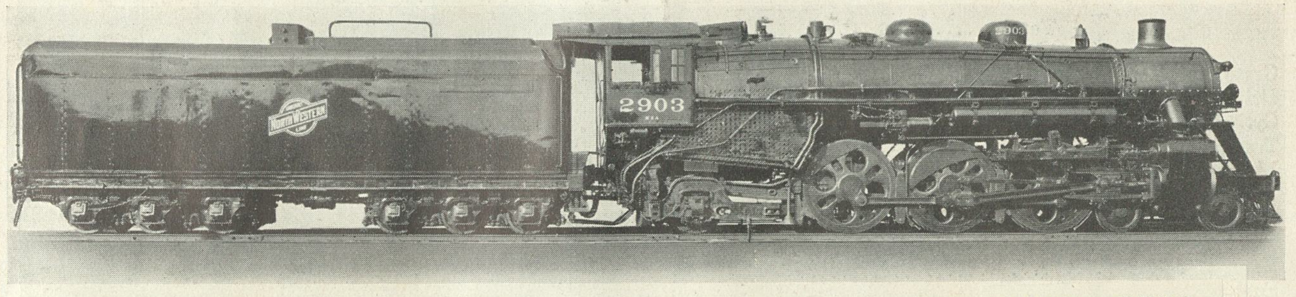
**THE**
**FAMOUS "400"**
**between**
**CHICAGO and**
**ST. PAUL-MINNEAPOLIS**
**via MILWAUKEE**

First of the Chicago-Twin Cities Speedliners, the "400", 400 miles in 400 minutes. Initial trip on January 2, 1935

**Light Weight of Individual Cars in One of the New "400" Trains**

| Car No. | Kind | Body, lb. | Trucks, lb. | Total, lb. |
|---|---|---|---|---|
| 7500 | Baggage-tavern ........... | 84,150 | 36,450 | 120,600 |
| 3400 | Coach-stewardess' room .... | 77,200 | 36,500 | 113,700 |
| 3410 | Coach ...................... | 77,200 | 36,400 | 113,600 |
| 3411 | Coach ...................... | 77,300 | 36,100 | 113,400 |
| 3412 | Coach ...................... | 77,600 | 36,100 | 113,700 |
| 6950 | Diner ...................... | 86,850 | 38,250 | 125,100 |
| 6500 | Parlor-drawing room ...... | 76,450 | 36,450 | 112,900 |
| 6501 | Parlor-drawing room ..... | 76,600 | 36,200 | 112,800 |
| 6502 | Parlor-drawing room ..... | 76,500 | 36,500 | 113,000 |
| 7200 | Parlor-observation ......... | 78,120 | 36,380 | 114,500 |
|  | Total weight of 10 cars, lb. .................. |  |  | 1,153,300 |
|  | Total weight of 10 cars, tons ............... |  |  | 577 |
|  | Weight of locomotive in working order, tons .... |  |  | 308 |
|  | Total train weight, tons .................. |  |  | 885 |

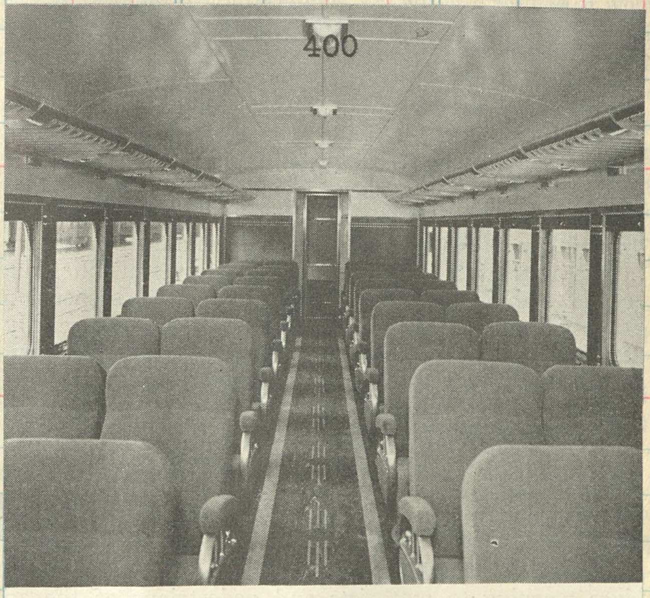




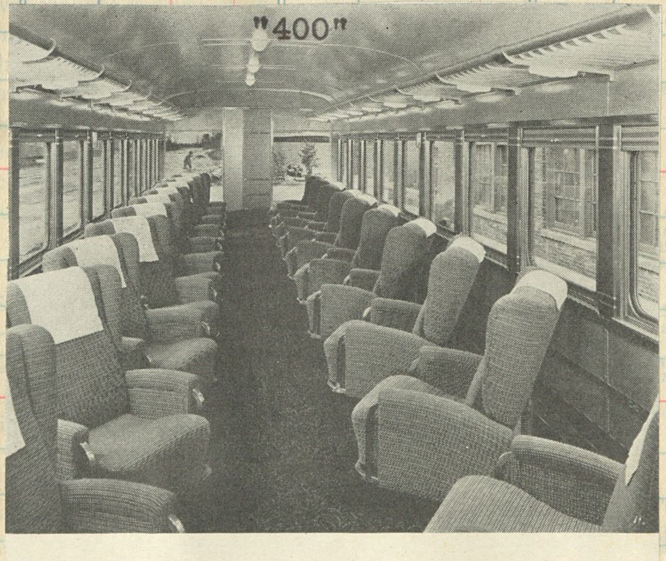
*One of the Four E-2-A Locomotives, Built in 1923 and Recently Reconditioned for Fast Passenger Service on the "400"*

2902, 2903,
2907, 2908

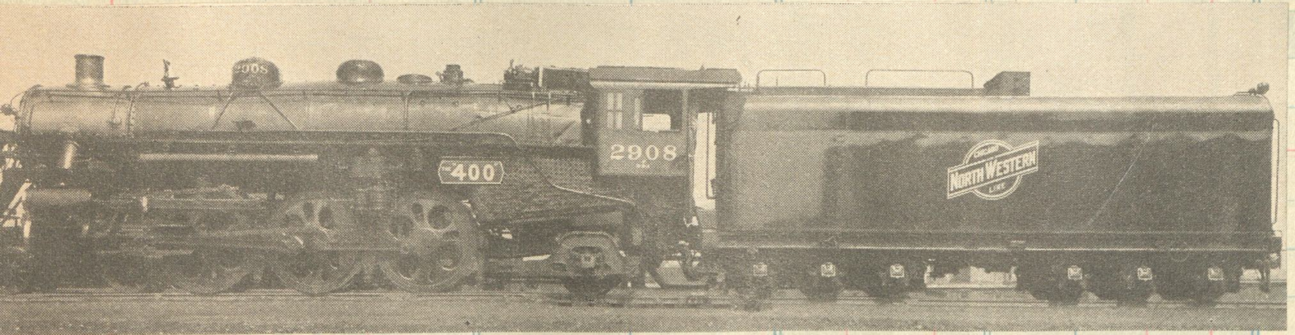
Four 4-6-2's reblt 1934 and tuned to run 100 mph

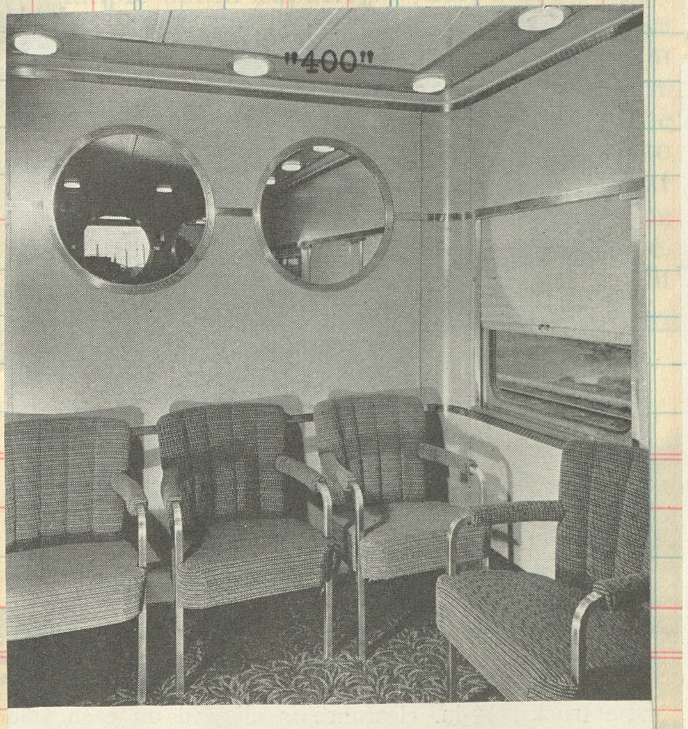


Interior of One of the Coaches

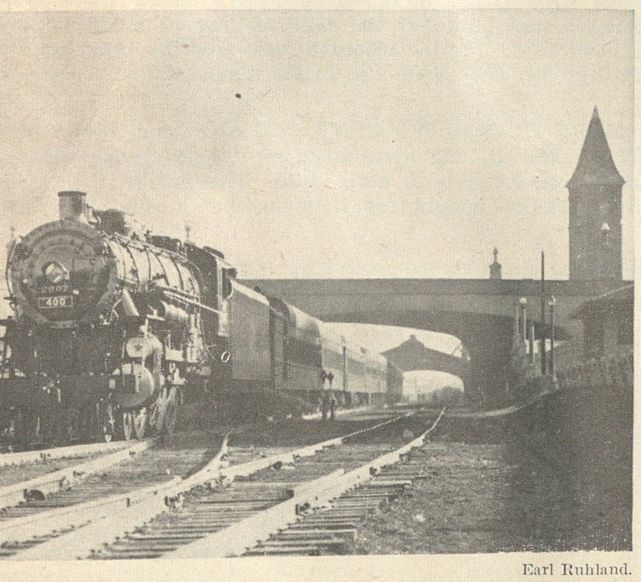


Individual Seats, Lighting Equipment and Decorative Treatment in One of the Parlor Cars



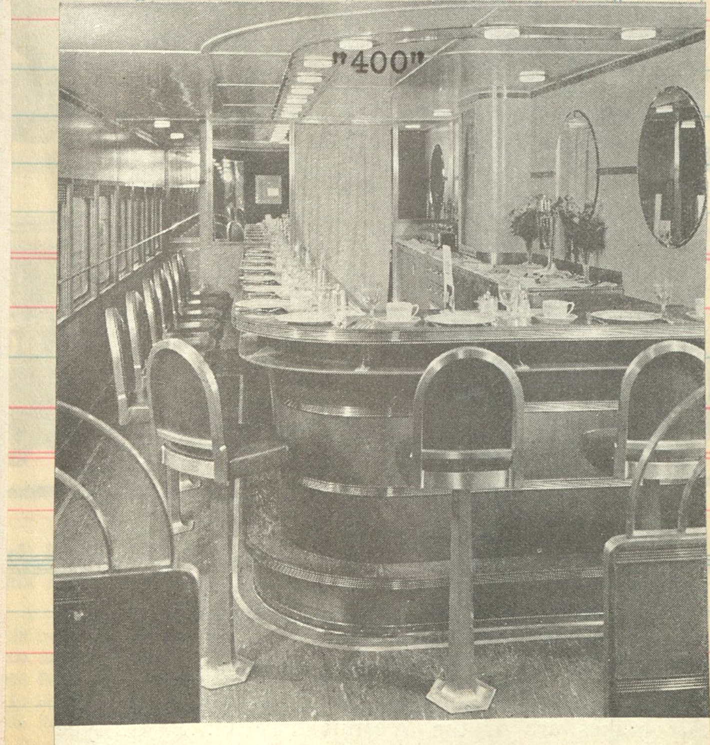


Smoking Room with Rubber-Cushion Chairs, Circular Mirrors and Luminator Light Fixtures

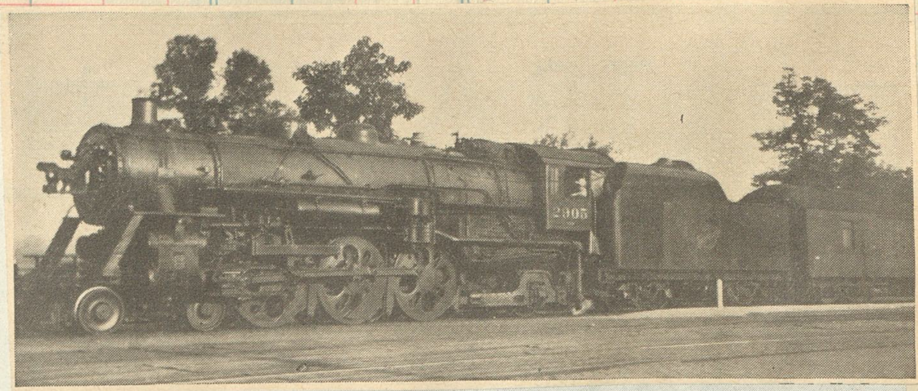


Earl Ruhland.

NCE THE NEWS WAS OUT that Burlington had ordered *hyrs* for the Chicago-Twin Cities run, Chicago & North stern quickly refurbished its track, inspected it with a rry railcar, air-conditioned standard equipment, souped four E-2 Pacifics, and inaugurated the *400* (408½ miles in minutes) on January 2, 1935. Train was an immediate success, once showed movies en route, was streamlined in 1939.



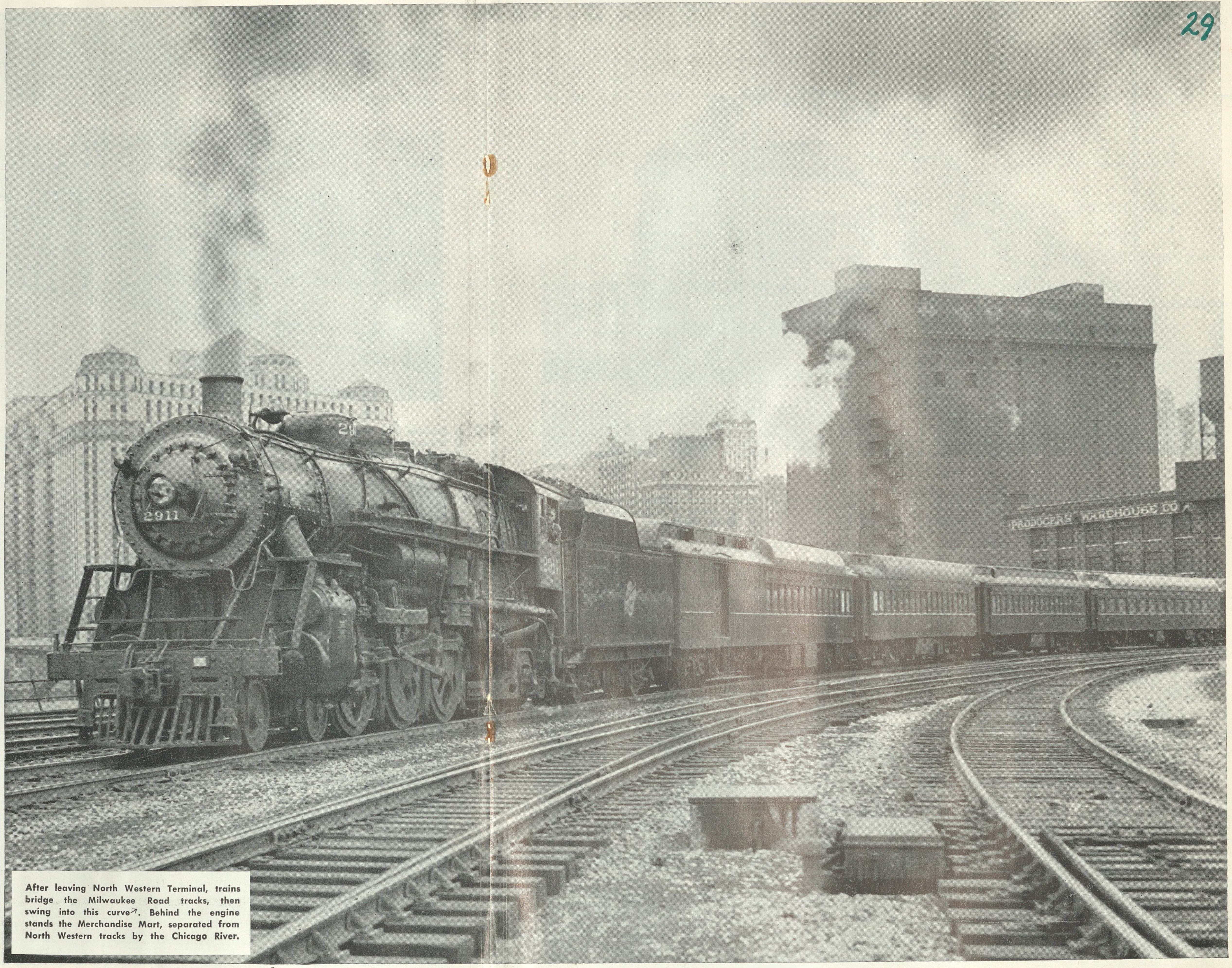
The Coffee Shop



**CHICAGO and**
**NORTH WESTERN**
**LINE**

29

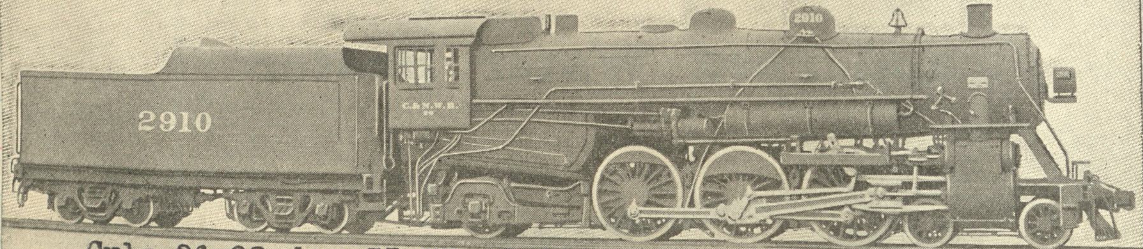
Clos. No. Sold Amount Clos. No. Sold Amount Clos.



**After leaving North Western Terminal, trains bridge the Milwaukee Road tracks, then swing into this curve↗. Behind the engine stands the Merchandise Mart, separated from North Western tracks by the Chicago River.**

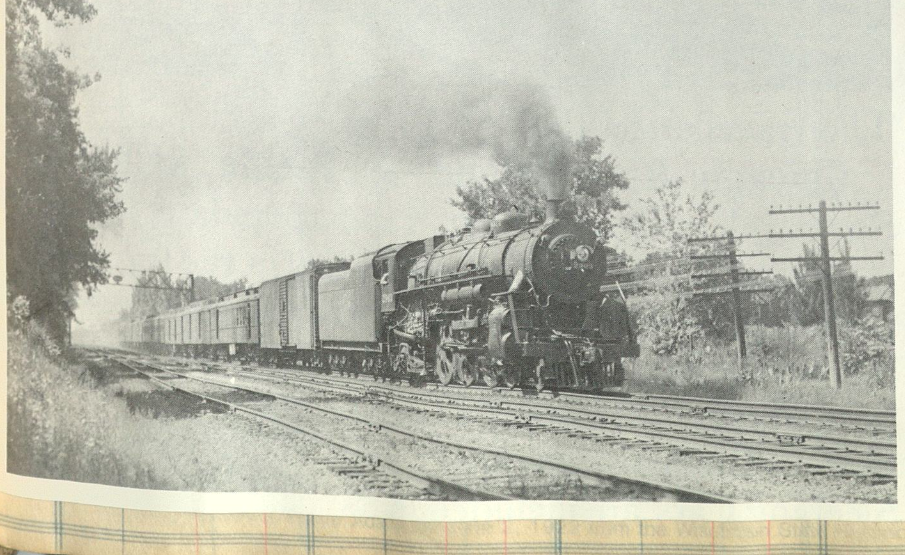
Eng 2907 gets a wheel on Trn 508, a local to Chicago, thru Monona Yard-Madison

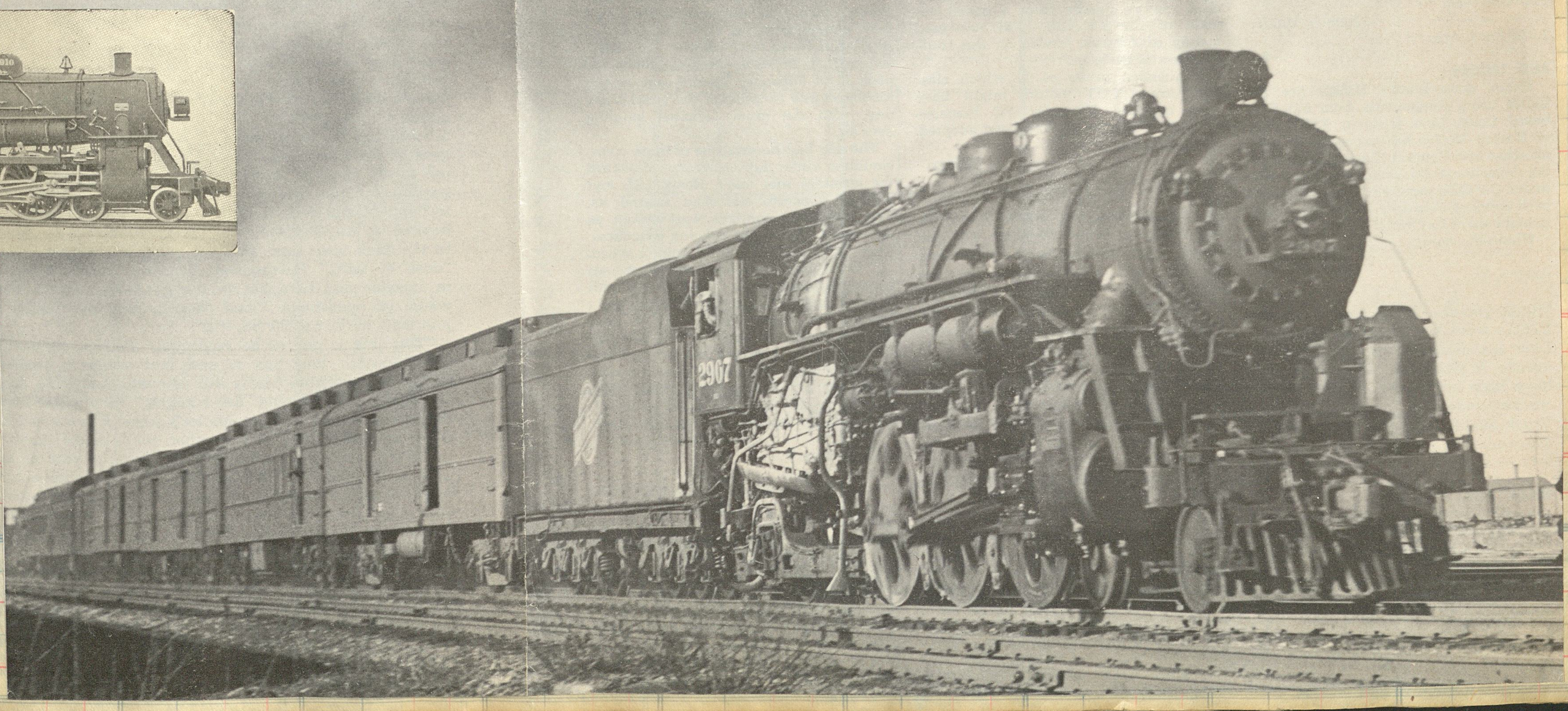
Class E-2, 2901-2912, Schen 1923



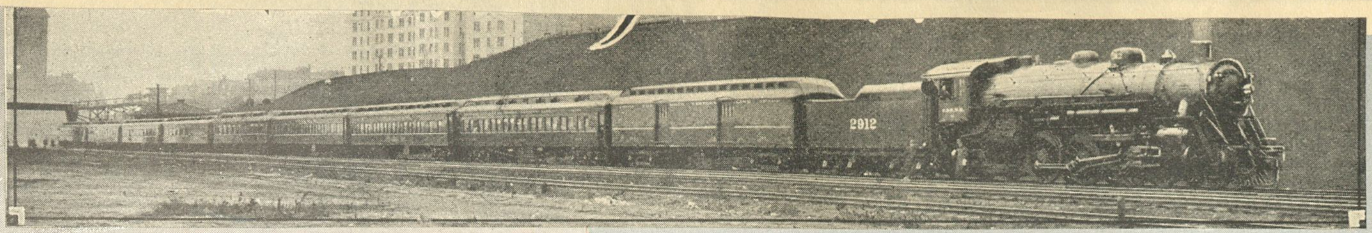
Cyls 26x28 dvs 75 TF 45,000

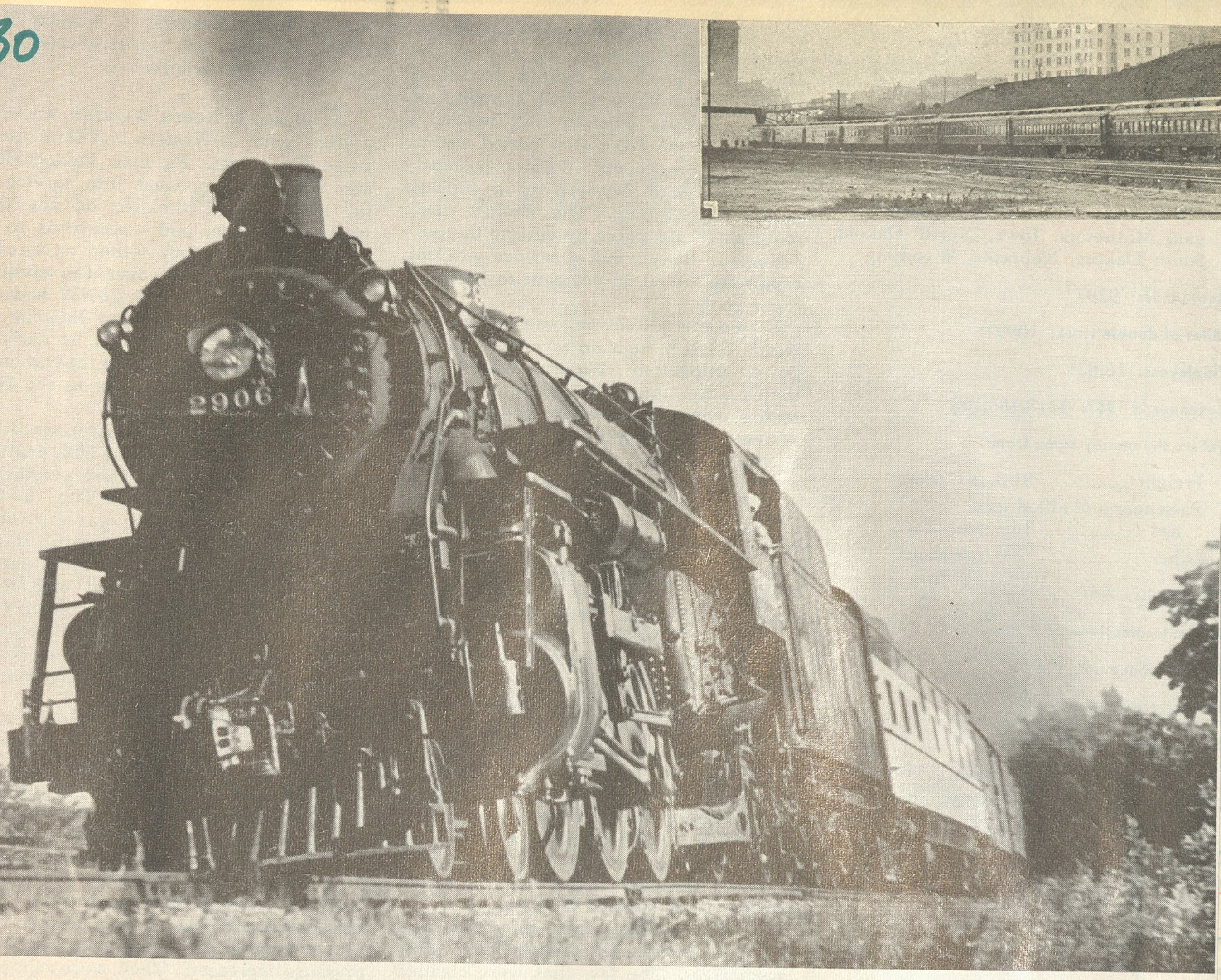
#501, the Viking, with eng 2903 at Park Ridge





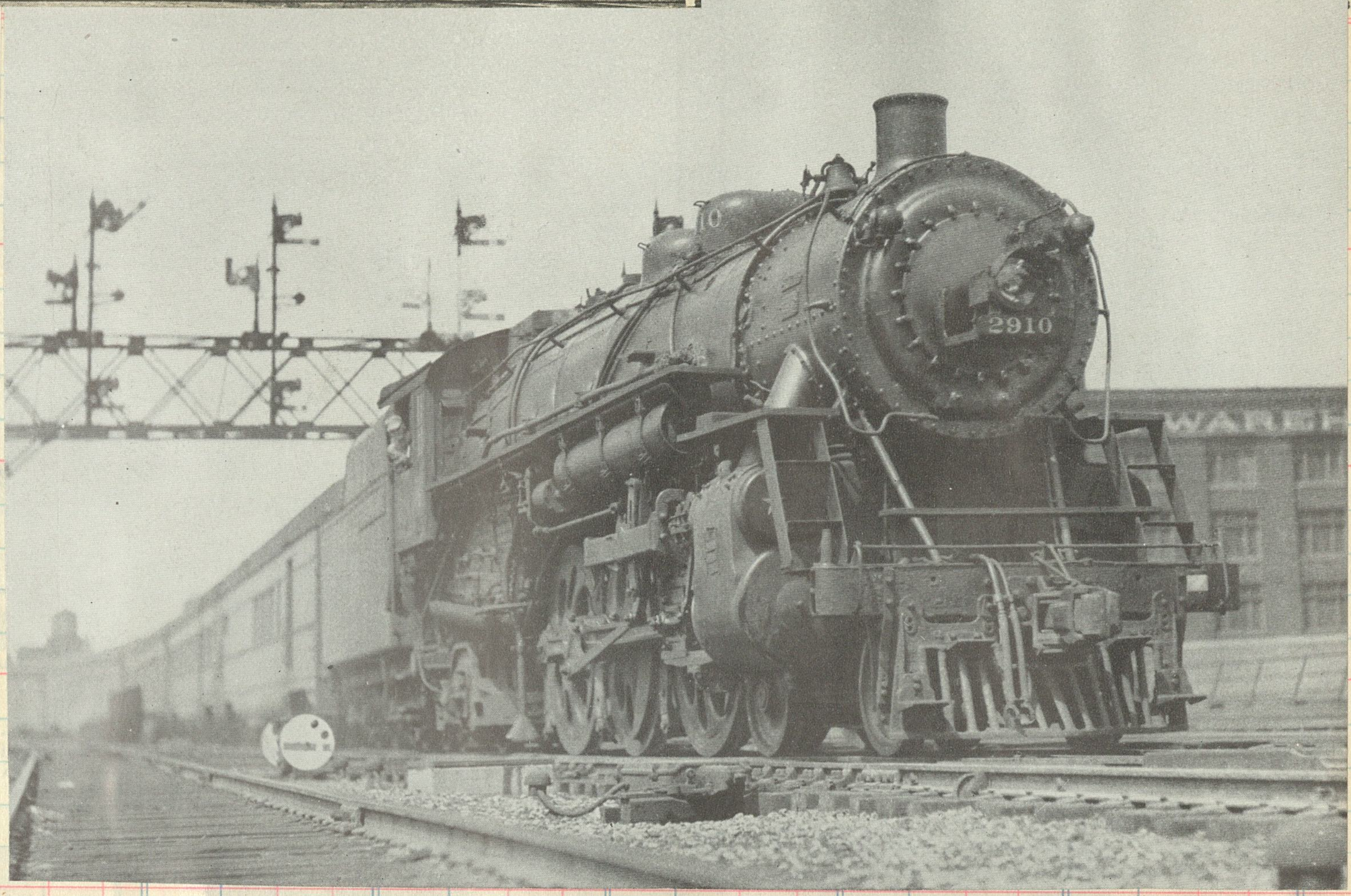
No. Sold Amount





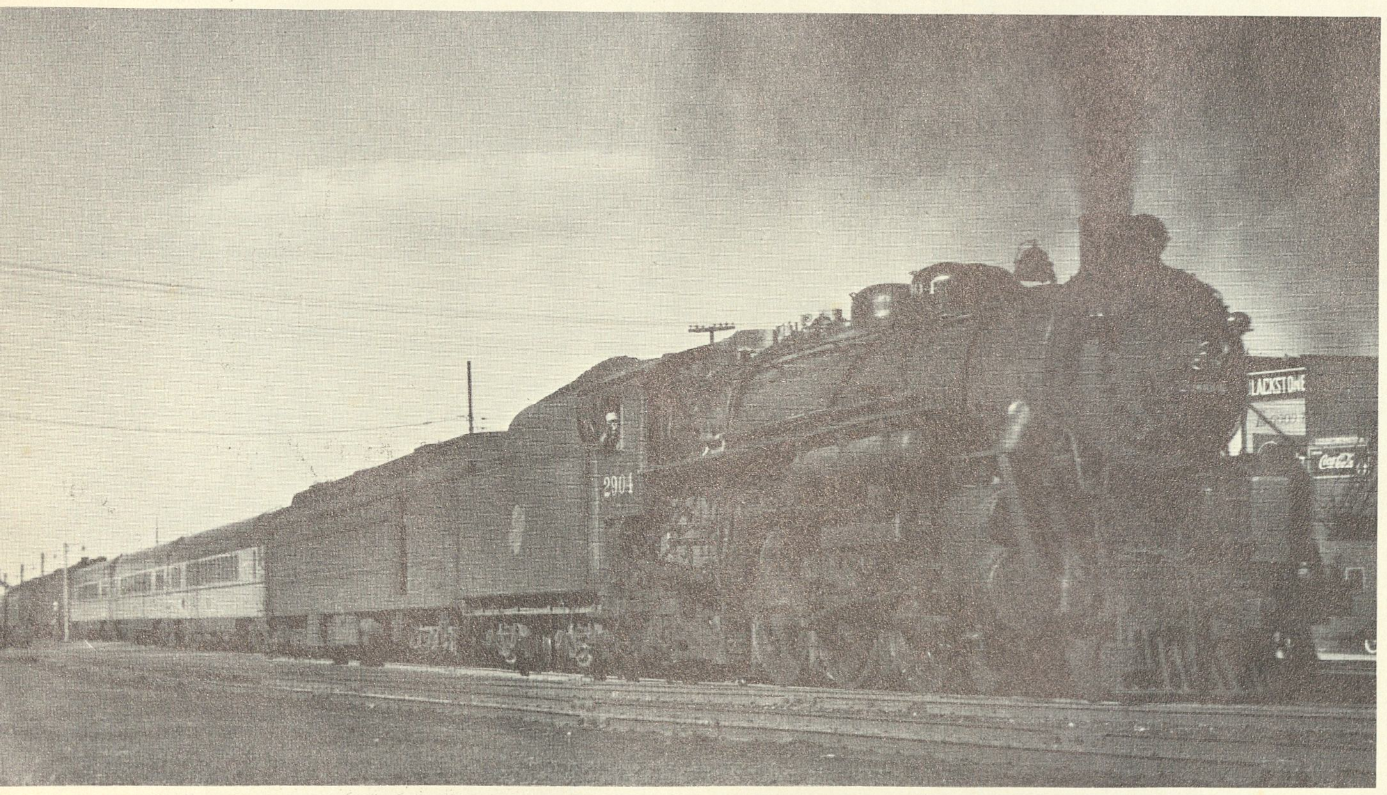
Robert H. Noble.

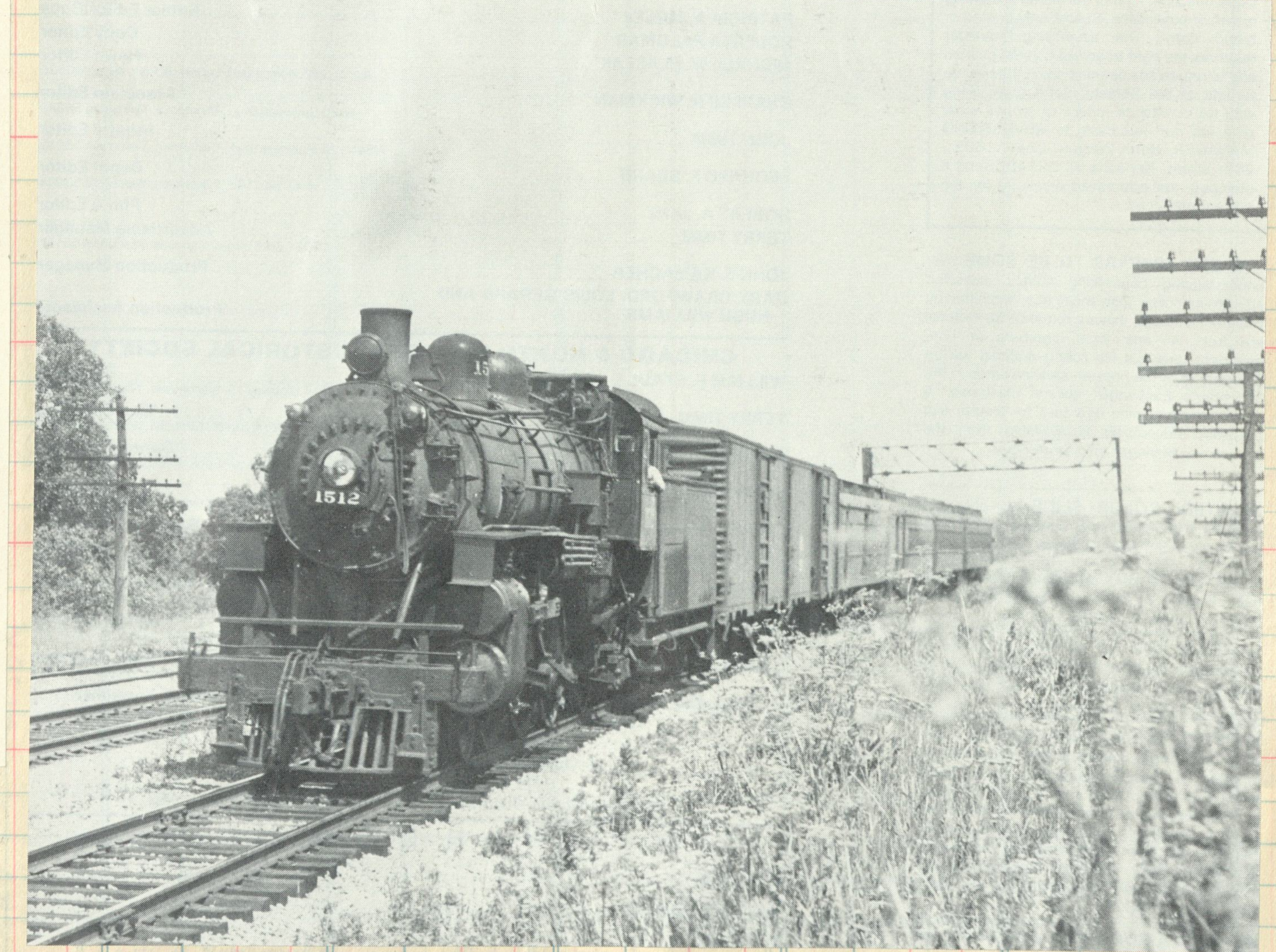
**SPEEDY SOUTHPAW:** E-2 class Pacific 2906, an engine souped up for the original 400 of 1935, relives her golden days in 1951 as she barrels through a curve at Lake Forest, Ill., with train 107, a Milwaukee-bound local.



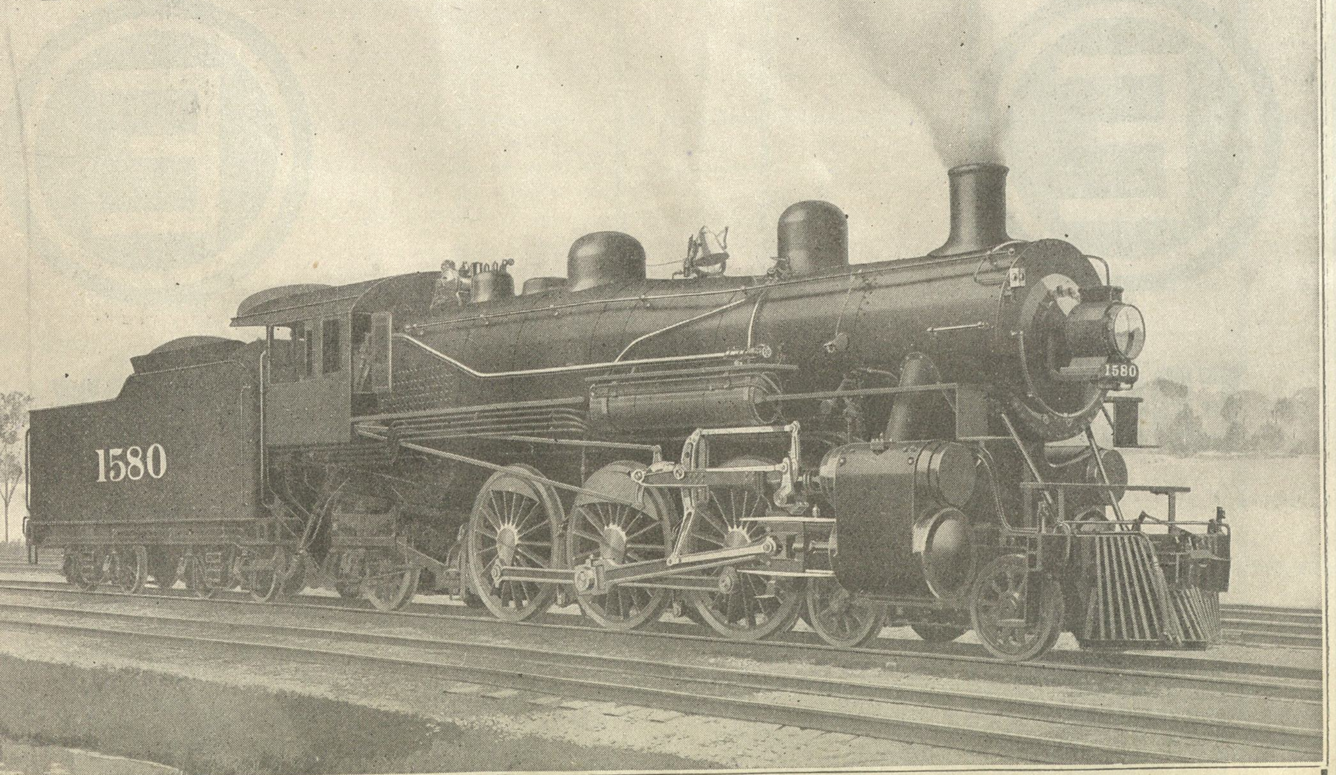
**Chicago and North Western, Train No. 110. Eastbound Flambeau, leaving Green Bay, Wisconsin July 1947.**

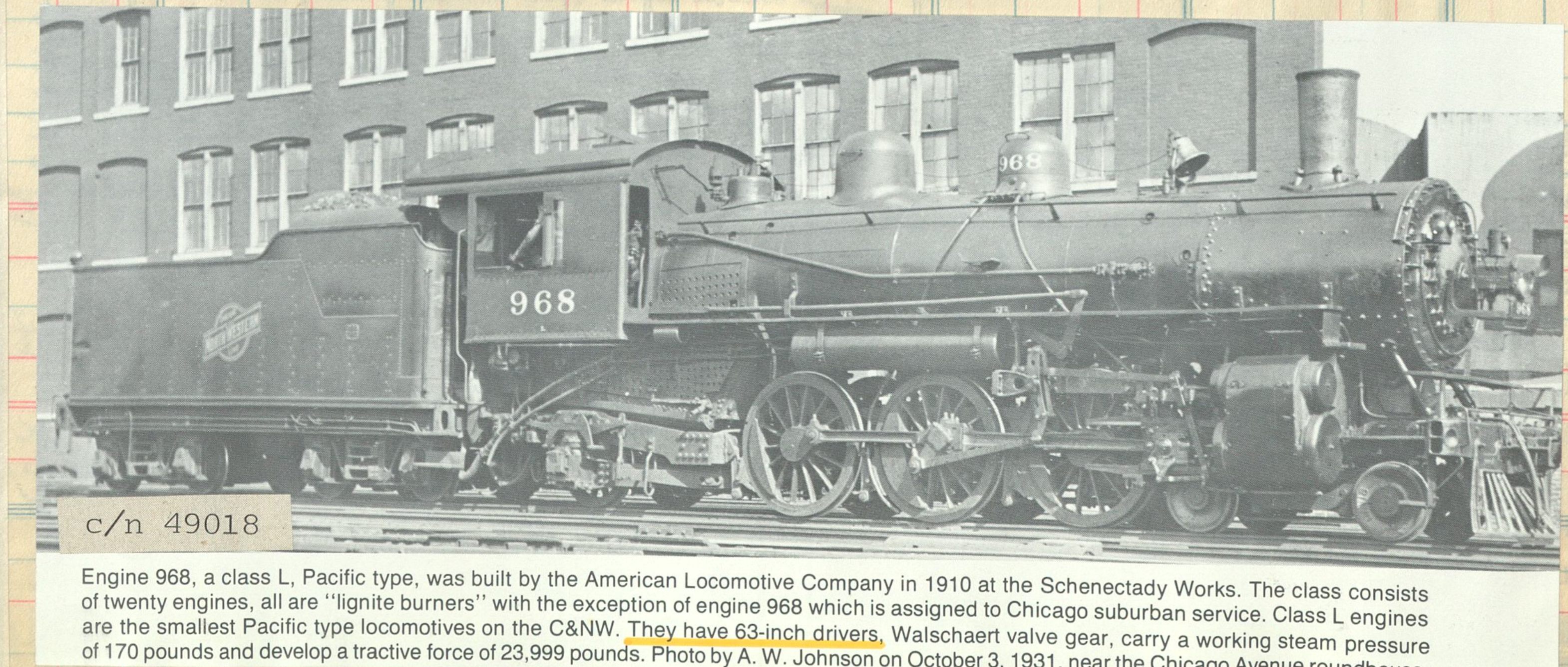
**Charles H. Ost**





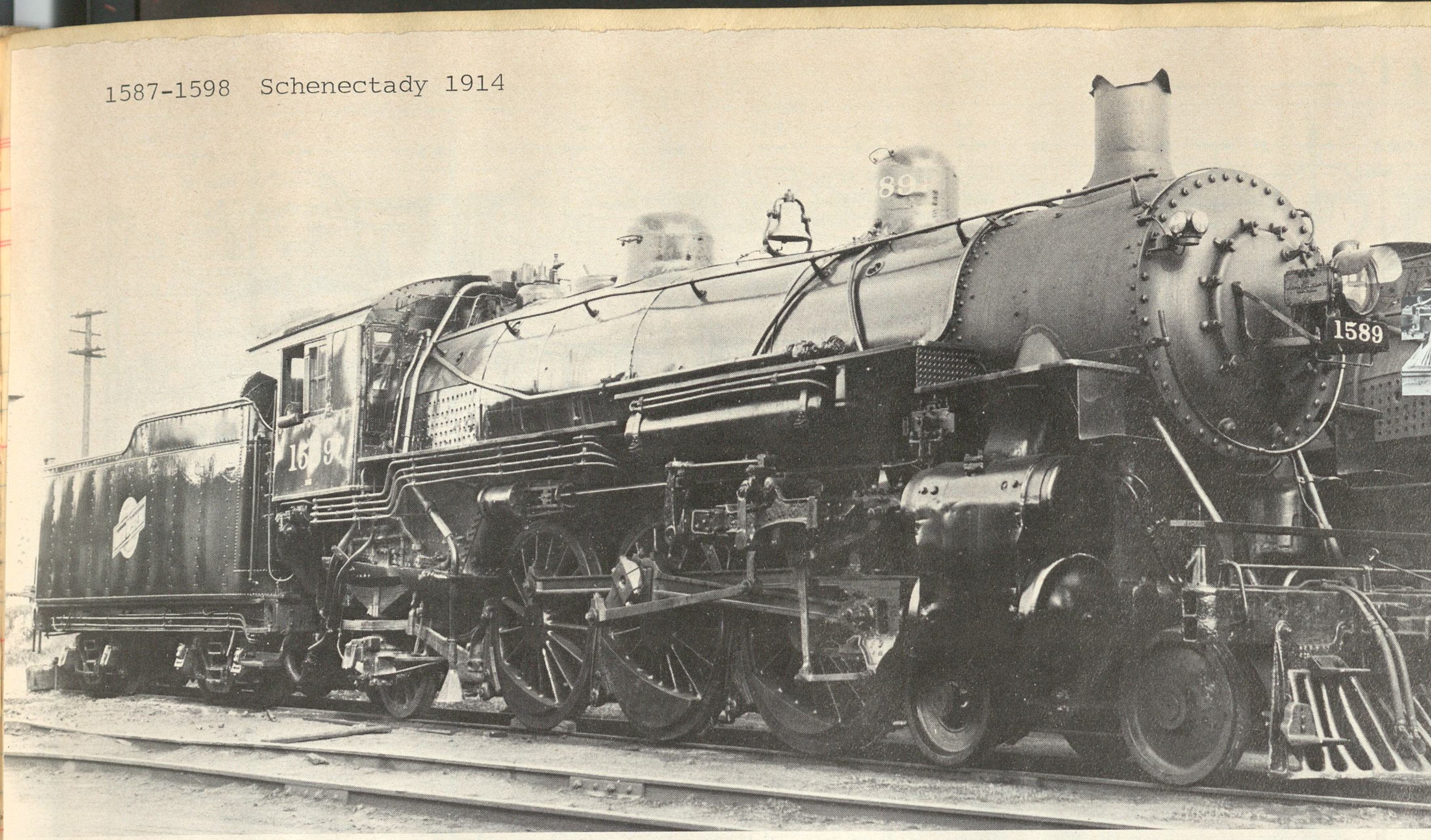
1580-1586 c/n 53032 Schenectady 1913



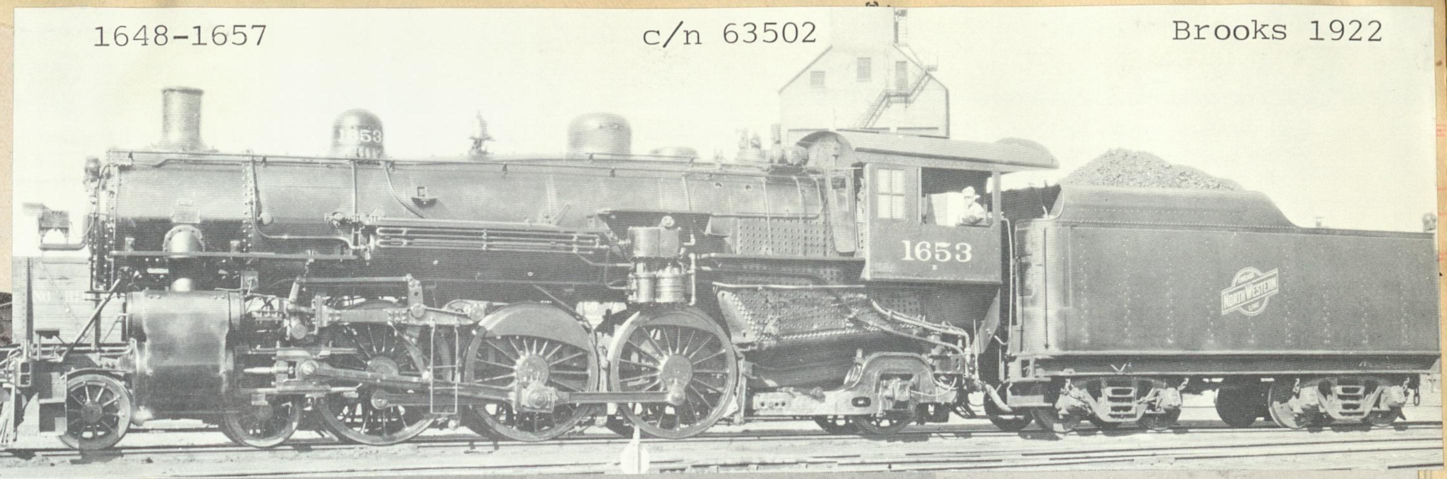


c/n 49018

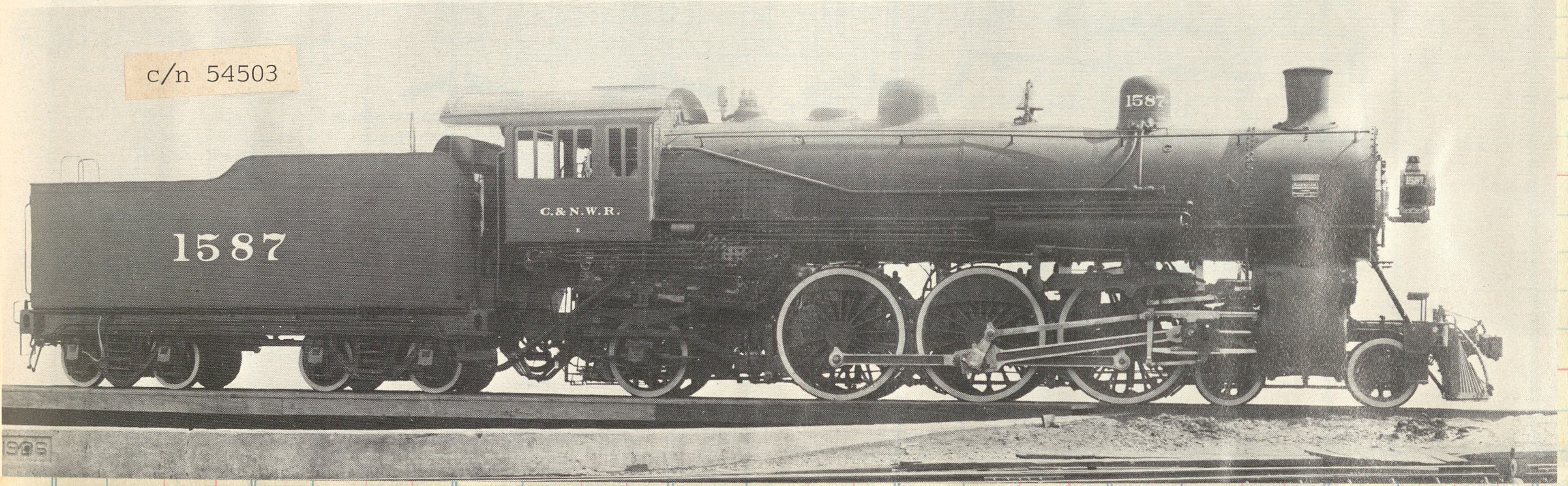
Engine 968, a class L, Pacific type, was built by the American Locomotive Company in 1910 at the Schenectady Works. The class consists of twenty engines, all are "lignite burners" with the exception of engine 968 which is assigned to Chicago suburban service. Class L engines are the smallest Pacific type locomotives on the C&NW. They have 63-inch drivers, Walschaert valve gear, carry a working steam pressure of 170 pounds and develop a tractive force of 23,999 pounds. Photo by A. W. Johnson on October 3, 1931, near the Chicago Avenue roundhouse.



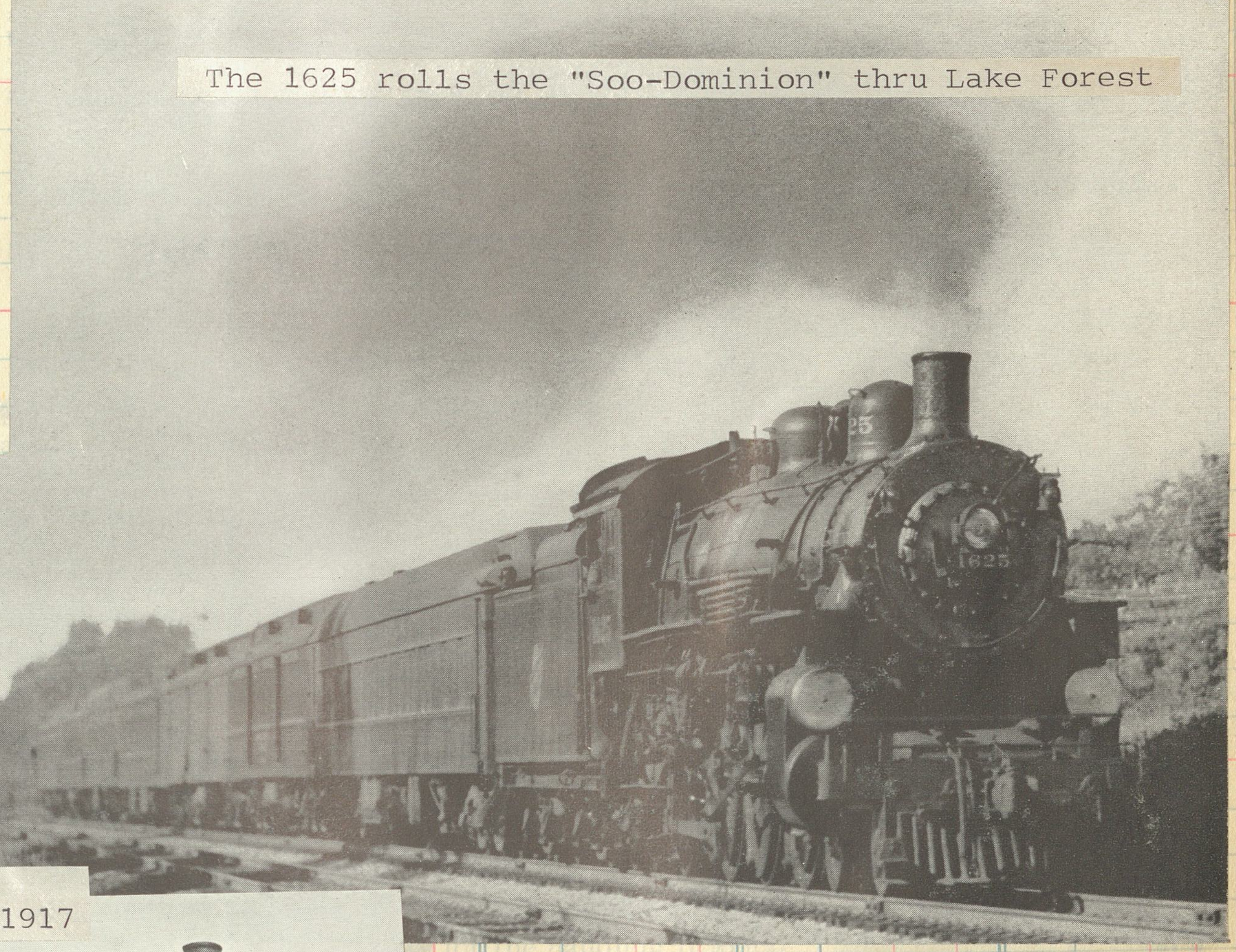
1587-1598 Schenectady 1914



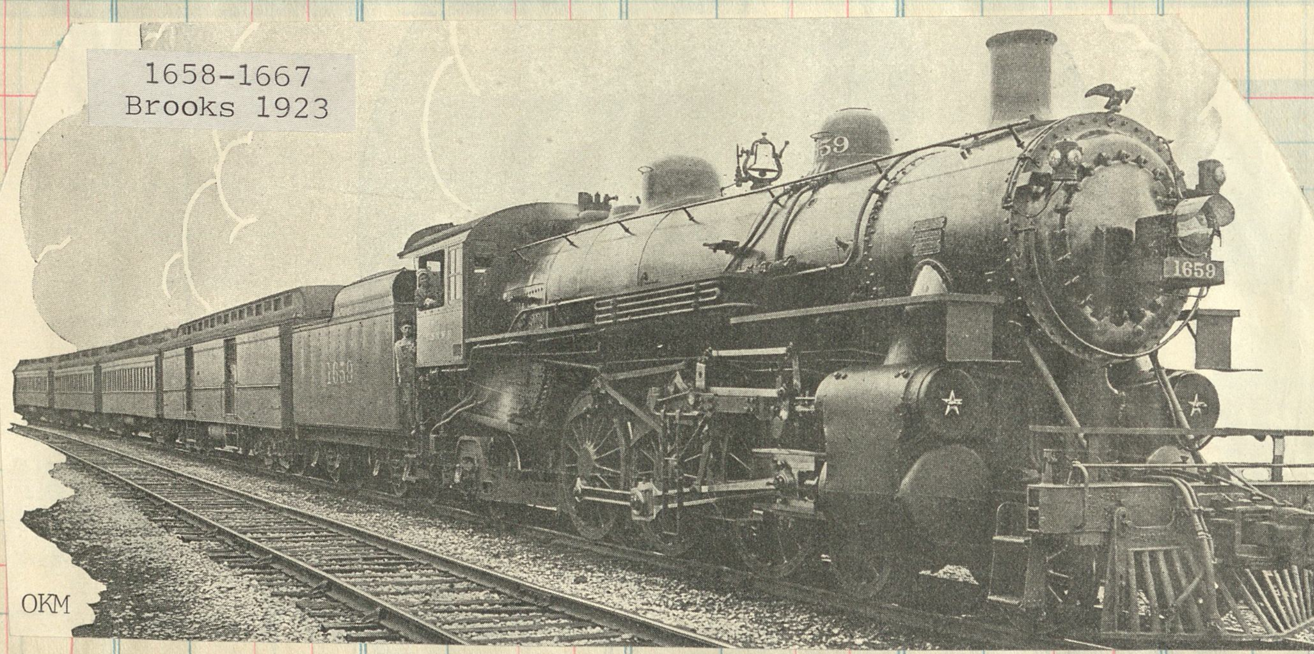
1648-1657 c/n 63502 Brooks 1922



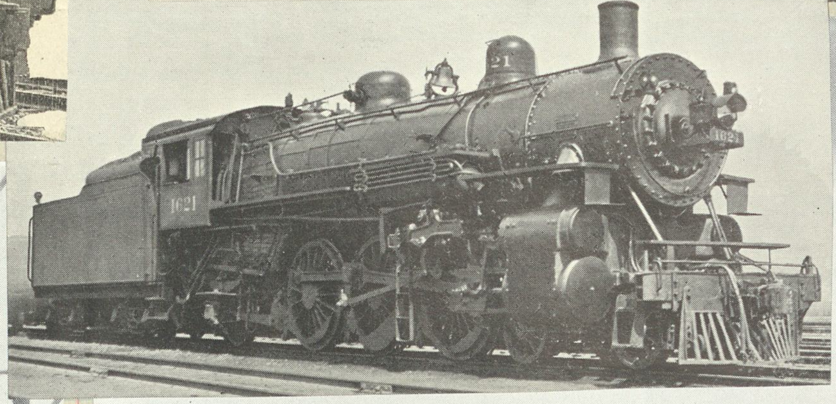
c/n 54503



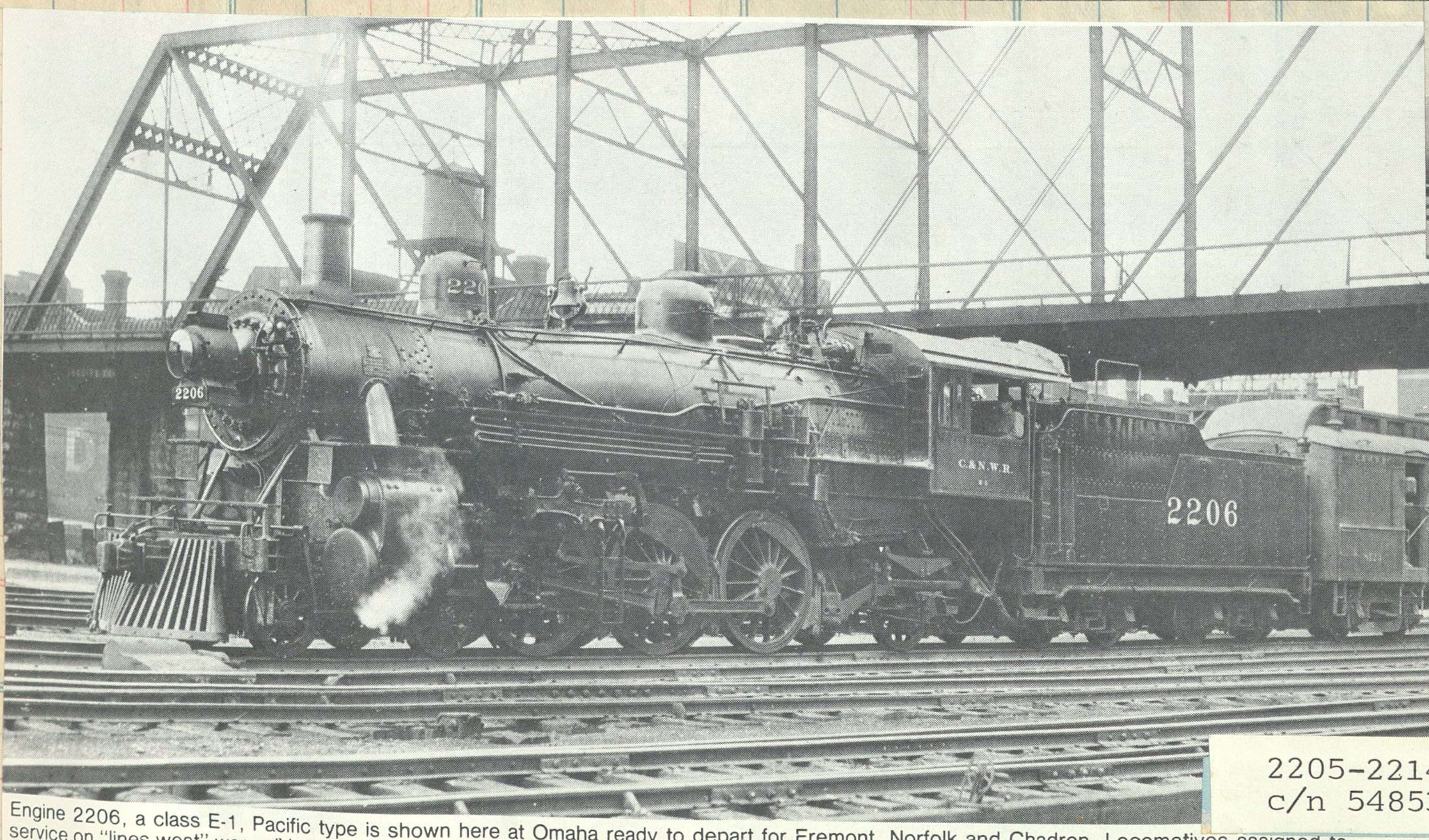
The 1625 rolls the "Soo-Dominion" thru Lake Forest



1658-1667
Brooks 1923

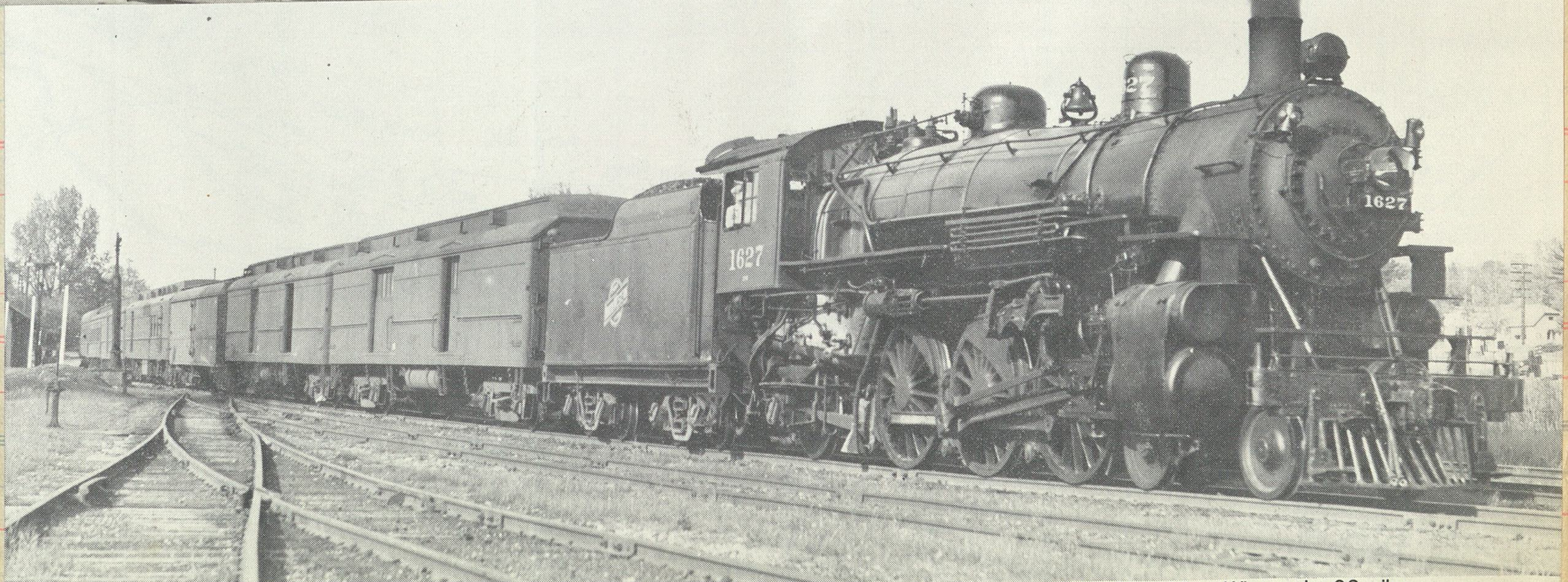


1616-1627
Schenectady 1917



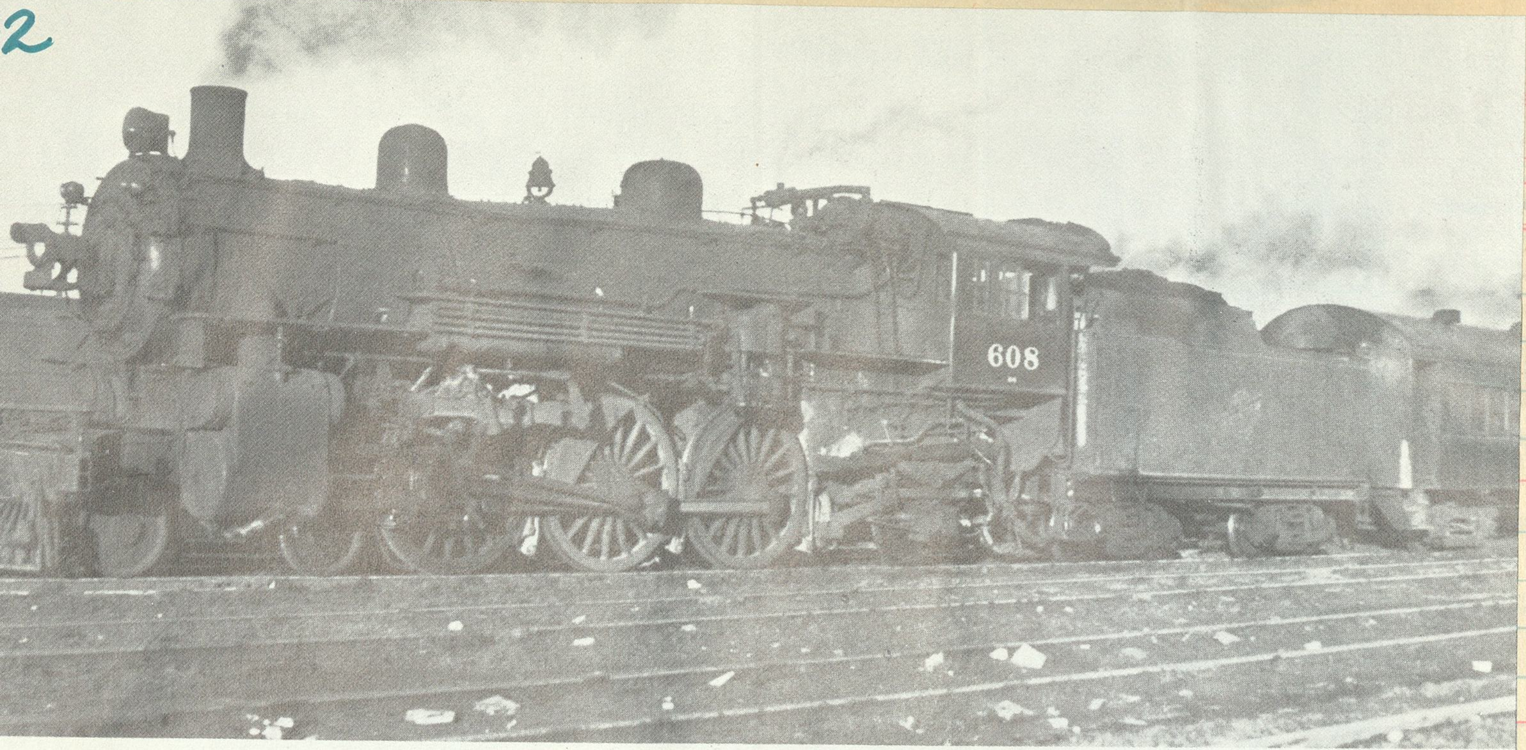
2205-2214
c/n 54853

Engine 2206, a class E-1, Pacific type is shown here at Omaha ready to depart for Fremont, Norfolk and Chadron. Locomotives assigned to service on "lines west" were oil burners. The usual power for this basically all steel consist was a Pacific type engine. The head car is a baggage-mail car, built by ACF in 1913. Originally, it was numbered 1351 and was fitted with six-wheel trucks. It was renumbered to 8123 in 1915 and re-fitted with four-wheel trucks in 1917. Engine 2206 was built in September of 1914 by the Schenectady Works of the American Locomotive Company. Photo by J. Foster Adams on June 2, 1922 from the Wisconsin State Historical Society collection.

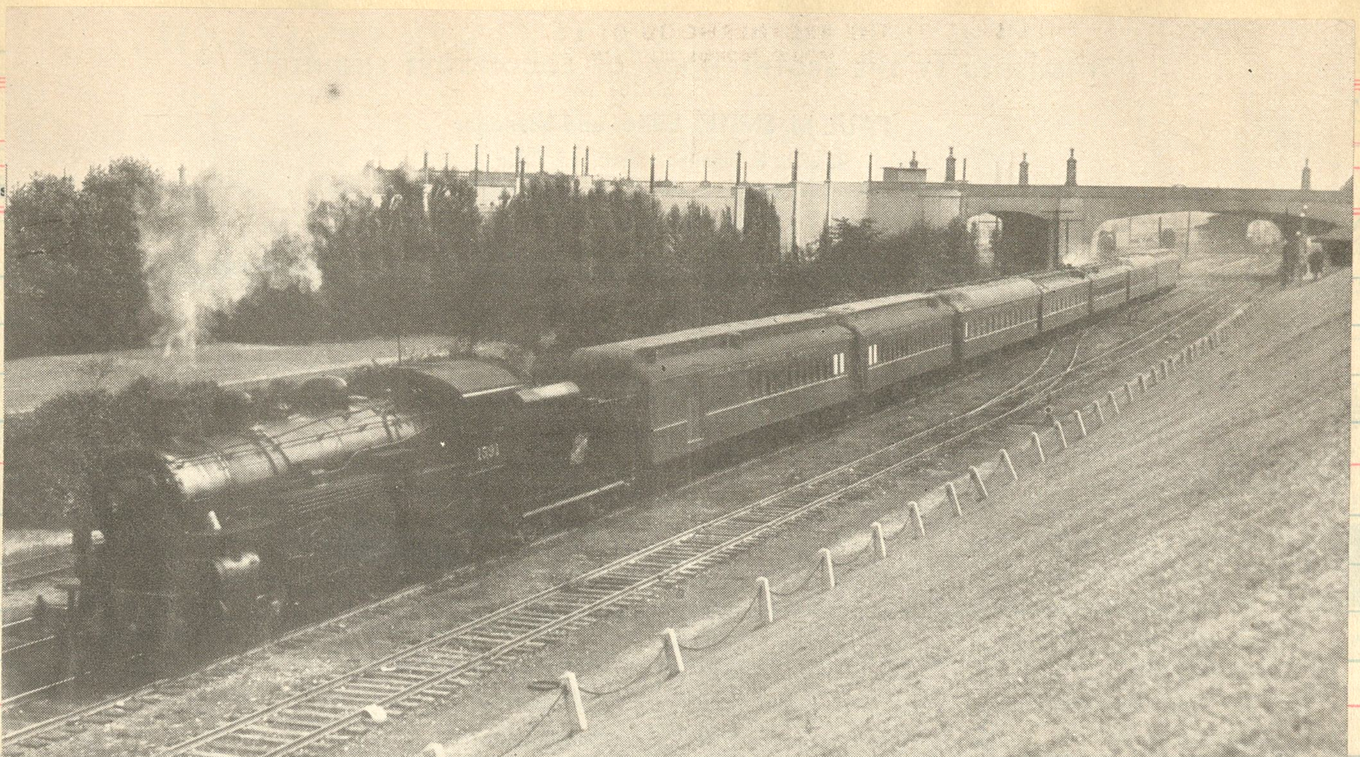


Engine 1627, a class E-S, 4-6-2 type storms out of Powers, Michigan with train number 224 enroute to Green Bay, Wisconsin, 92 miles to the south. Powers is a junction point on the line between Green Bay and Escanaba and the line to Iron Mountain, Michigan. Photo by Donald Steffen on May 31, 1948.

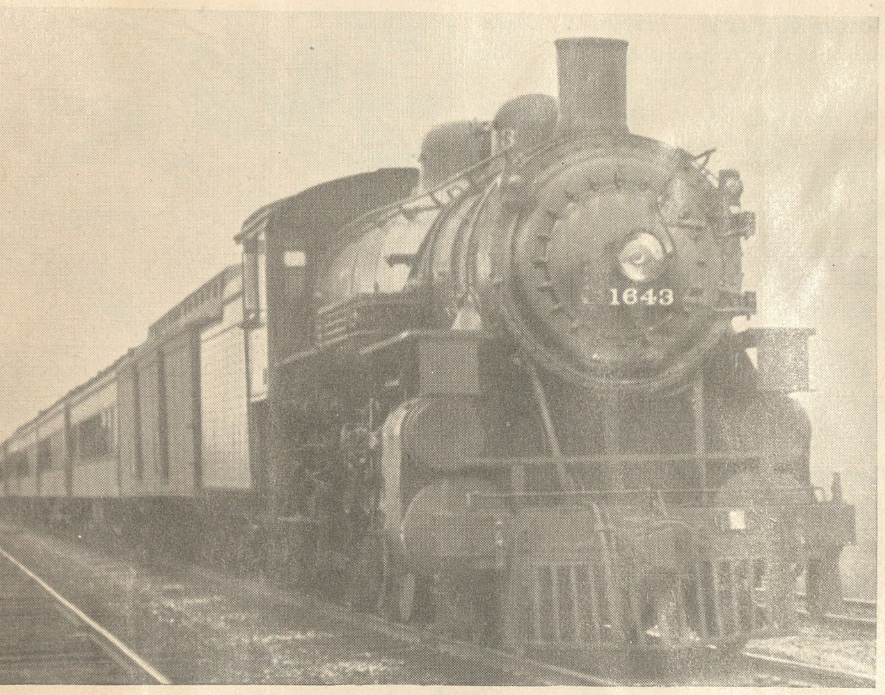
2



**THE CHICAGO & NORTH WESTERN RAILWAY** operated a large fleet of Pacific type steam locomotives in suburban service prior to 1956. Many of these locomotives that were assigned permanently to suburban service had pilots mounted on the tanks for back up running. Another unique feature of C&NW steam power was the addition of a red mars light mounted on top of the smoke box. This photo was taken during the C&NW's celebration of its first 100 years in operation in 1949. (Courtesy Bob Lorenz)



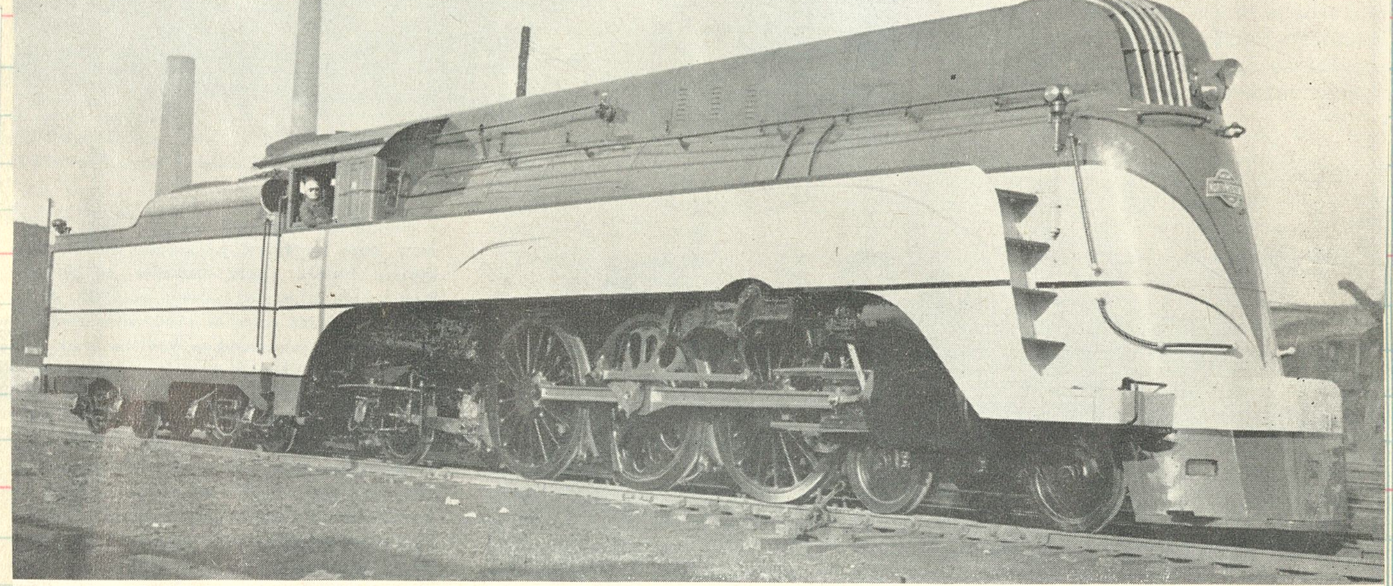
The seven car "Flambeau" departs Milwaukee behind the 1591



VERLAND LIMITED DRAWN BY LOCOMOTIVE 1643, CHICAGO & NORTH WESTERN

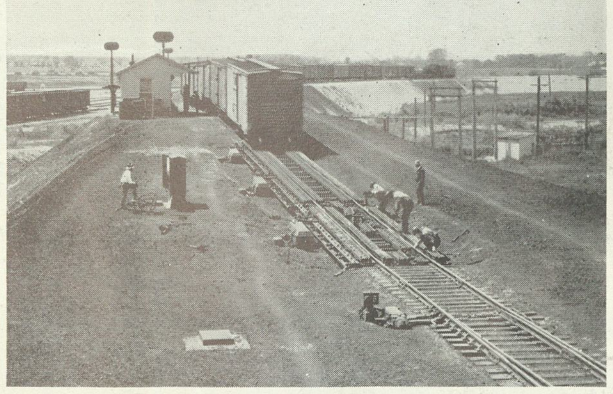
C&NW commuter trains combine arch and monitor roof equipment. This one is skimming into Norwood Park Station behind Pacific No. 1510.

Schen 1917 c/n 57318

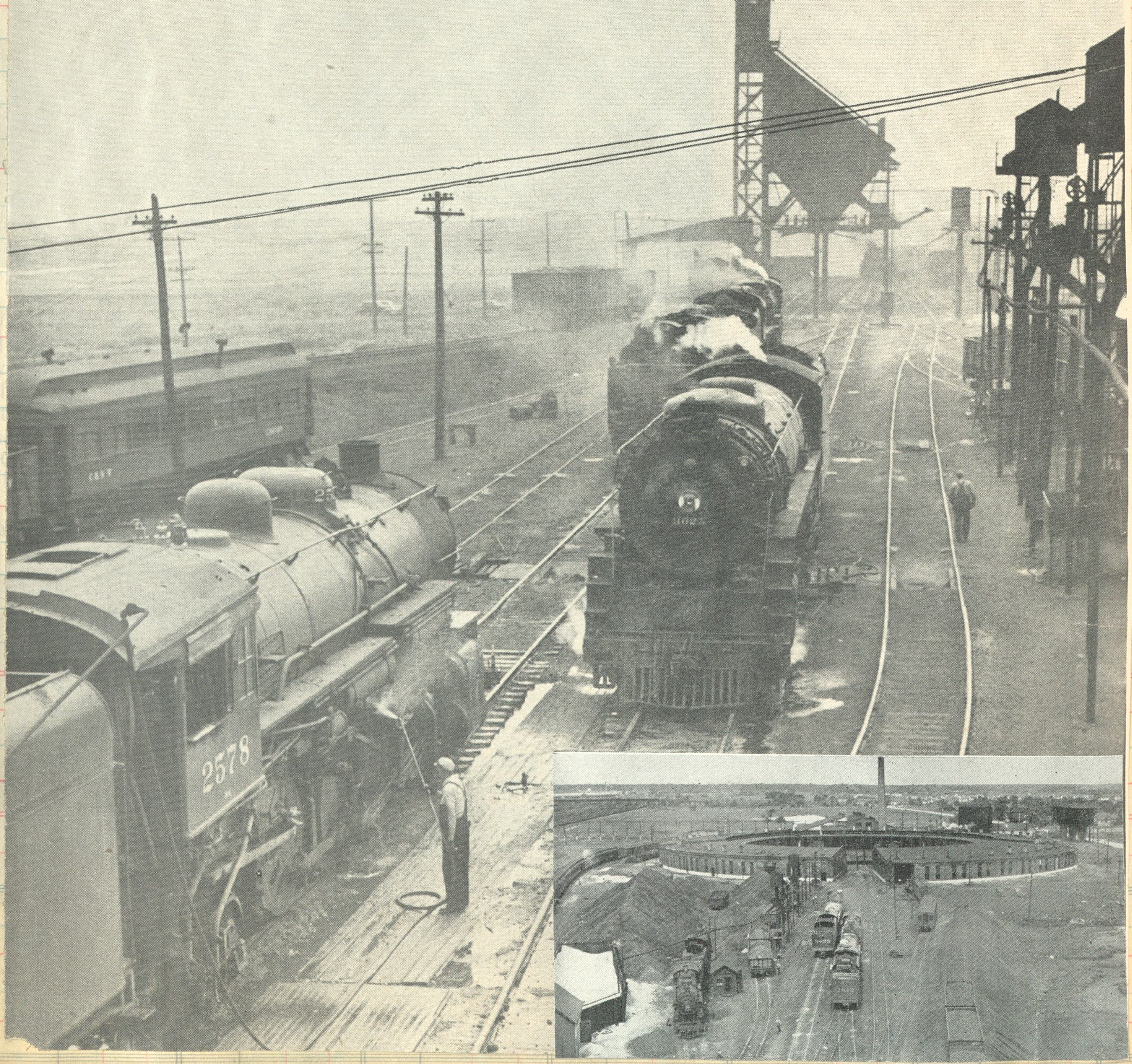


The 1617 gussied up for the "Minnesota 400" run -- 1942

The hump at Proviso



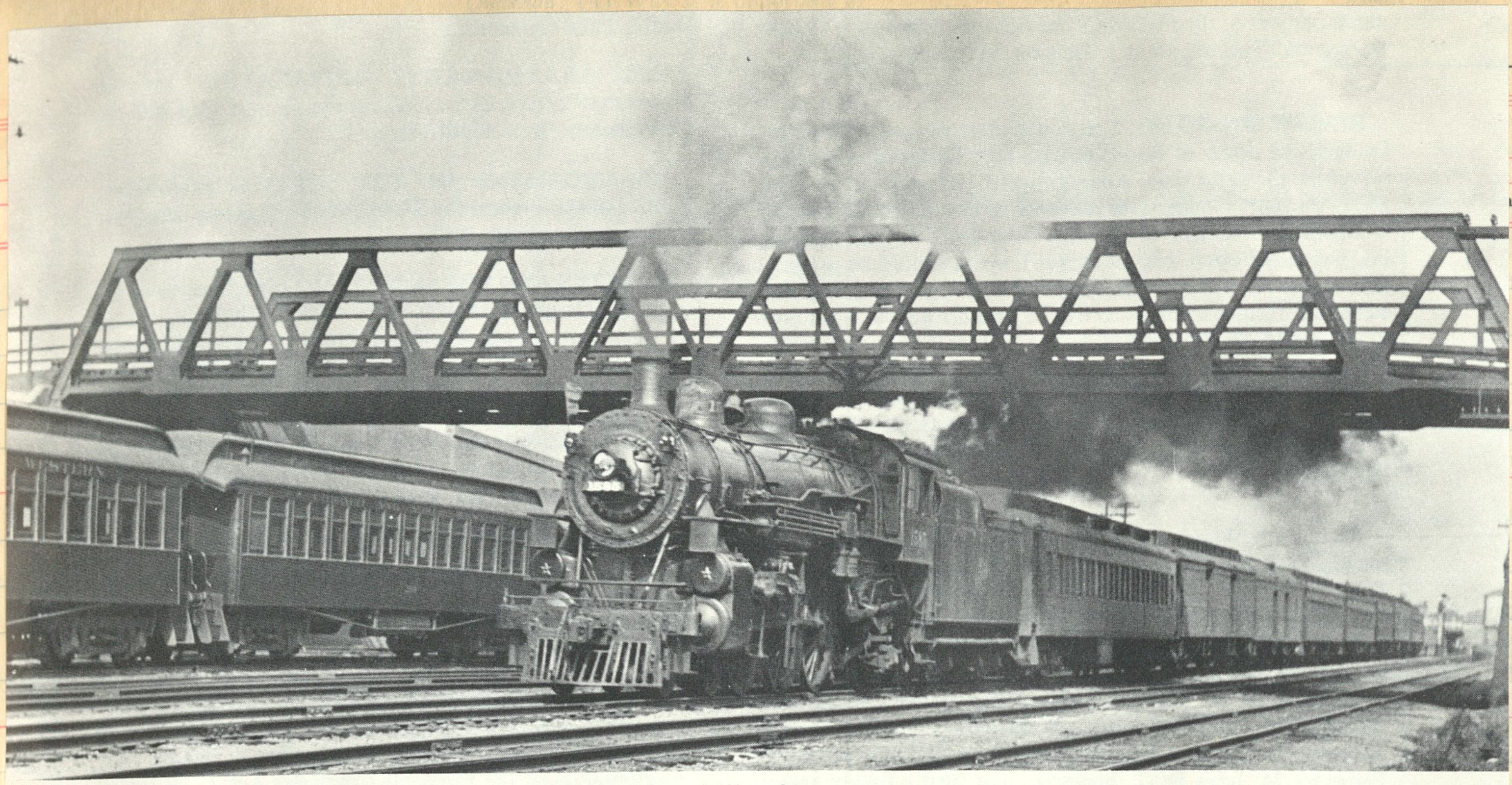
Engine terminal at Proviso



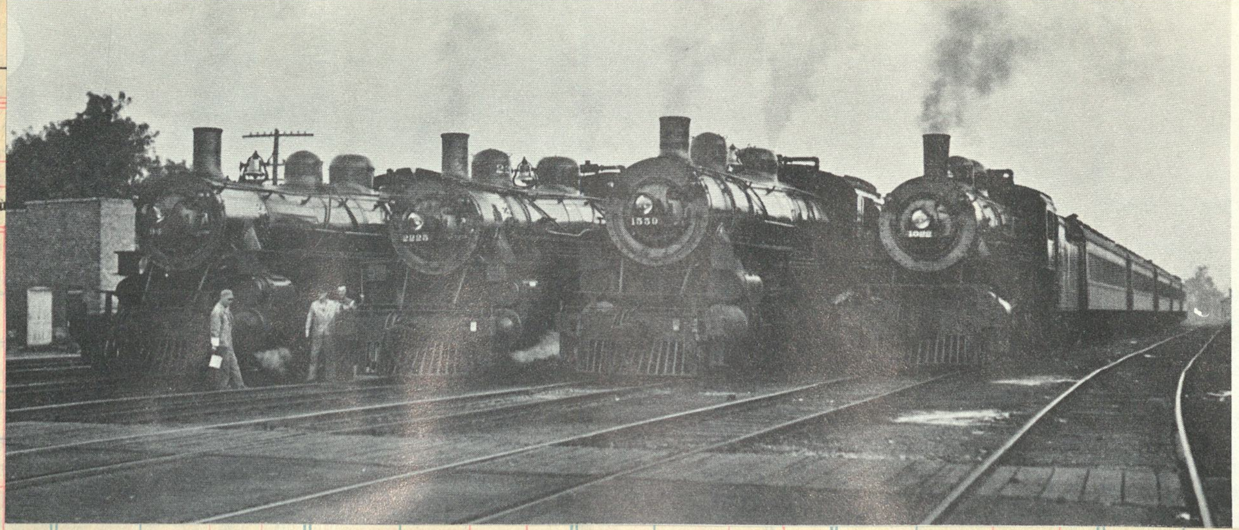
CHICAGO AND NORTH WESTERN

A Gasoline Tractor Hauling a String of Loaded Trucks in the Freight Transfer House Proviso

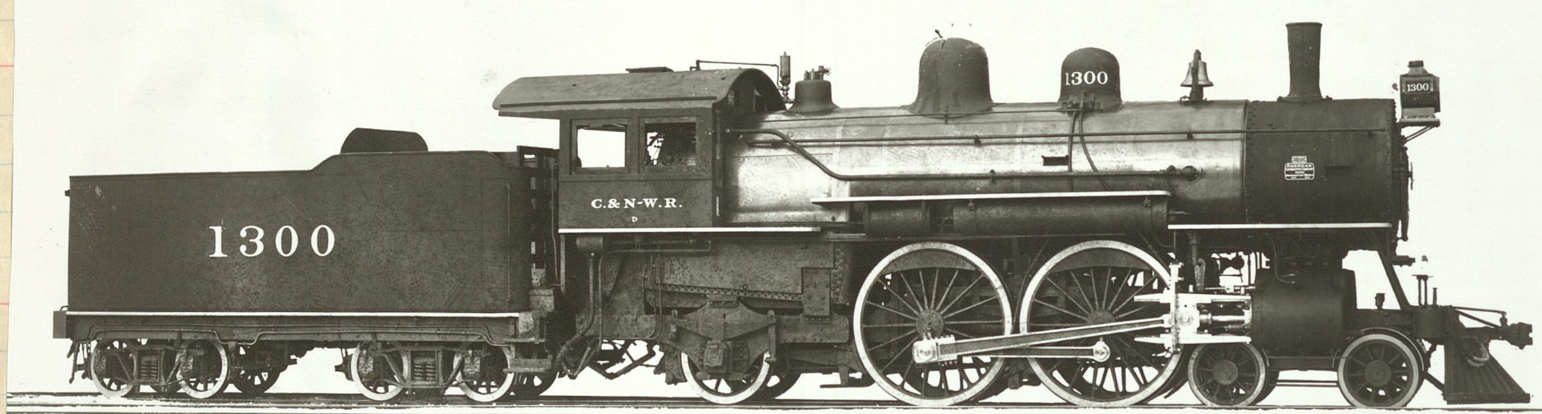
The Classification Yard at Proviso, Showing Switch Towers on the Hump



Engine 1585, a class E, Pacific type, is shown here passing through West Chicago eastbound with train number 18. She is carrying green flags on her smoke box indicating that another section is following. This view is east of the depot with the roundhouse to the left behind the coaches. Photographed on June 9, 1929.



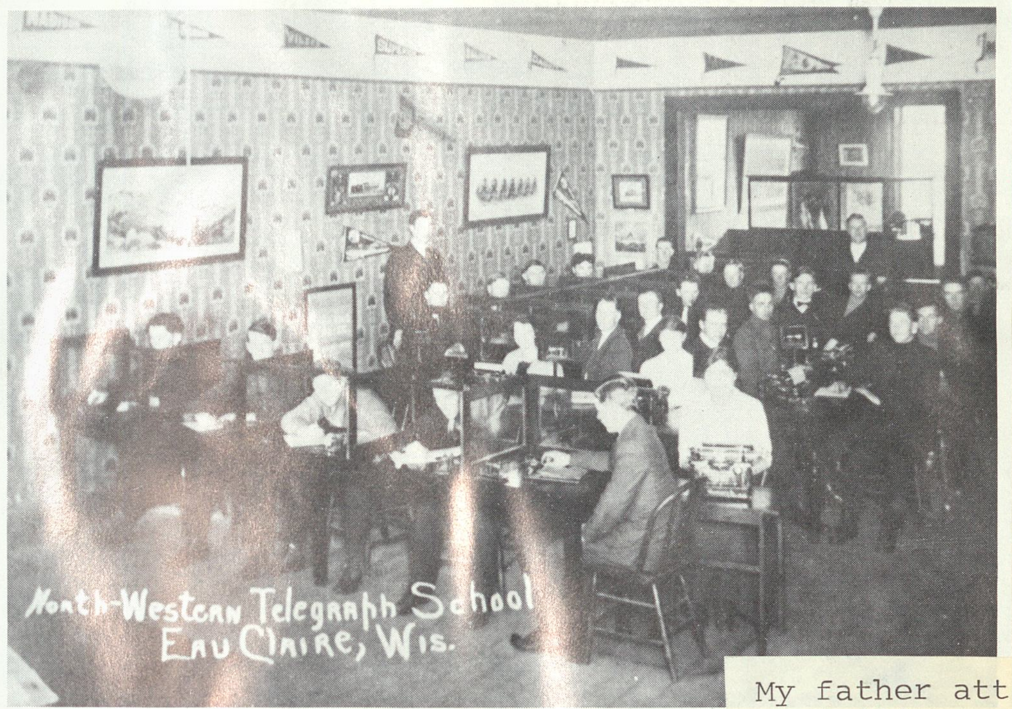
West of the depot, north of the main line to Clinton, on the old Freeport Line, was a coach yard which held several overnight layover suburban trains. Early every morning, engines would leave the roundhouse to pick up their string of green coaches for the trip into Chicago. In this July 14, 1933 view, engines 94, 2225, 1559 and 1022 are being readied for departure by their crews.



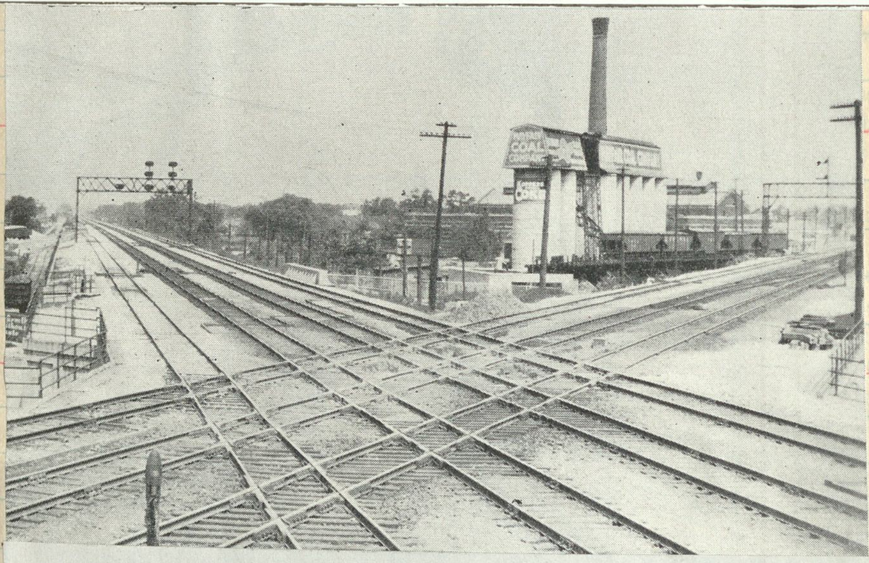
Times have changed, the morse code as well as the stations and the morse men who manned them have faded on into history.

Such was not the case when this photo was taken in 1916. Telegraph operators were very much in demand, however, compared to today's on the job paid training, this was not the case in 1916. If you wanted to become a telegrapher, you paid a good sum of money to attend the school. If you couldn't afford the money the school charged, you could try and break in working around the local depot without pay helping the agent with his chores in return for what he could teach you. This however, was no guarantee a job would be waiting for you.

Photo from Bob Mohr, C&NW chief train dispatcher, Butler, Wisconsin.

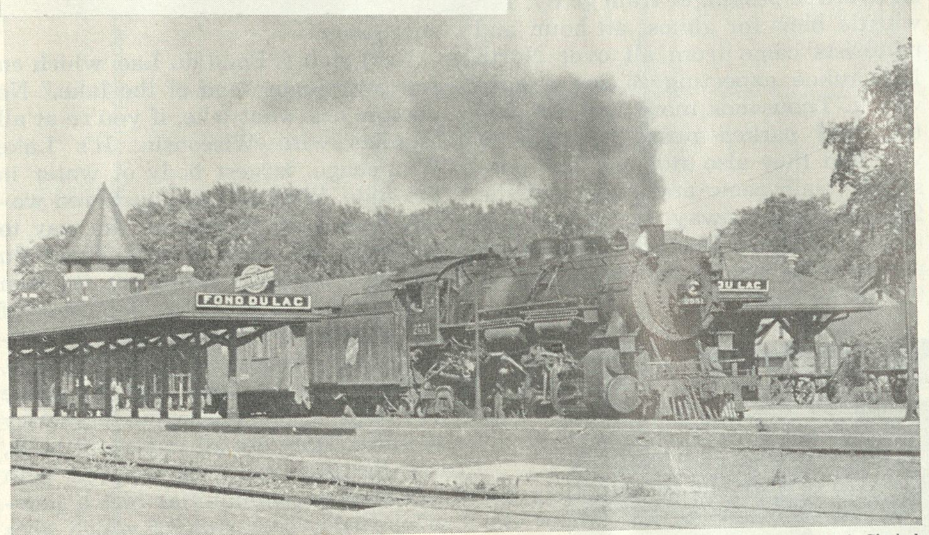


My father attended
a similiar school
at Janesville,Wis
summer 1906

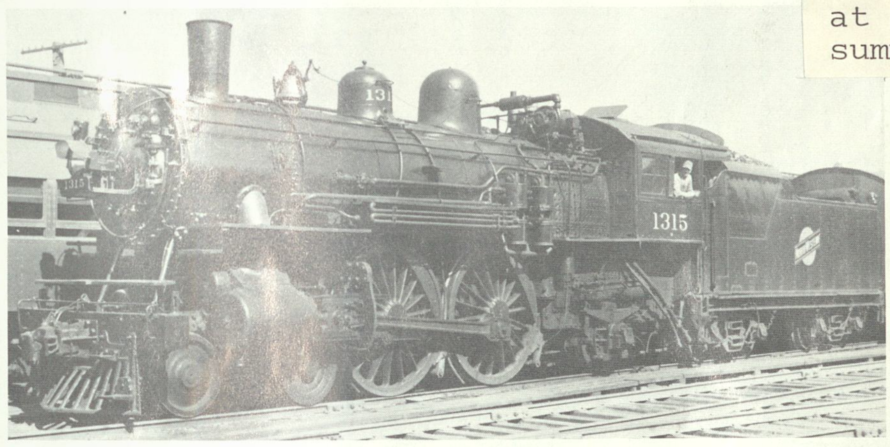


The diamond at Mayfair, eight miles out of Chicago, xng three tracks of the Milw Road

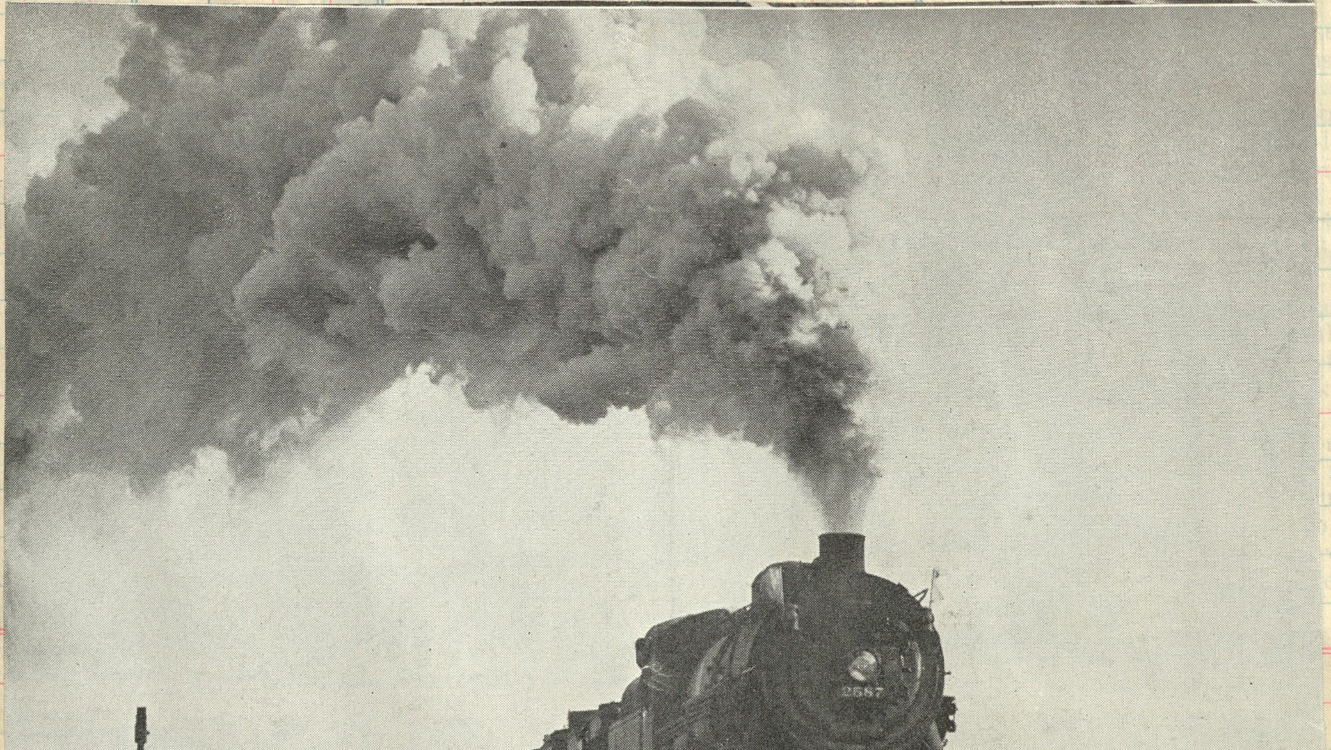
A Schenectady "classic"
Blt 1905 c/n 30293



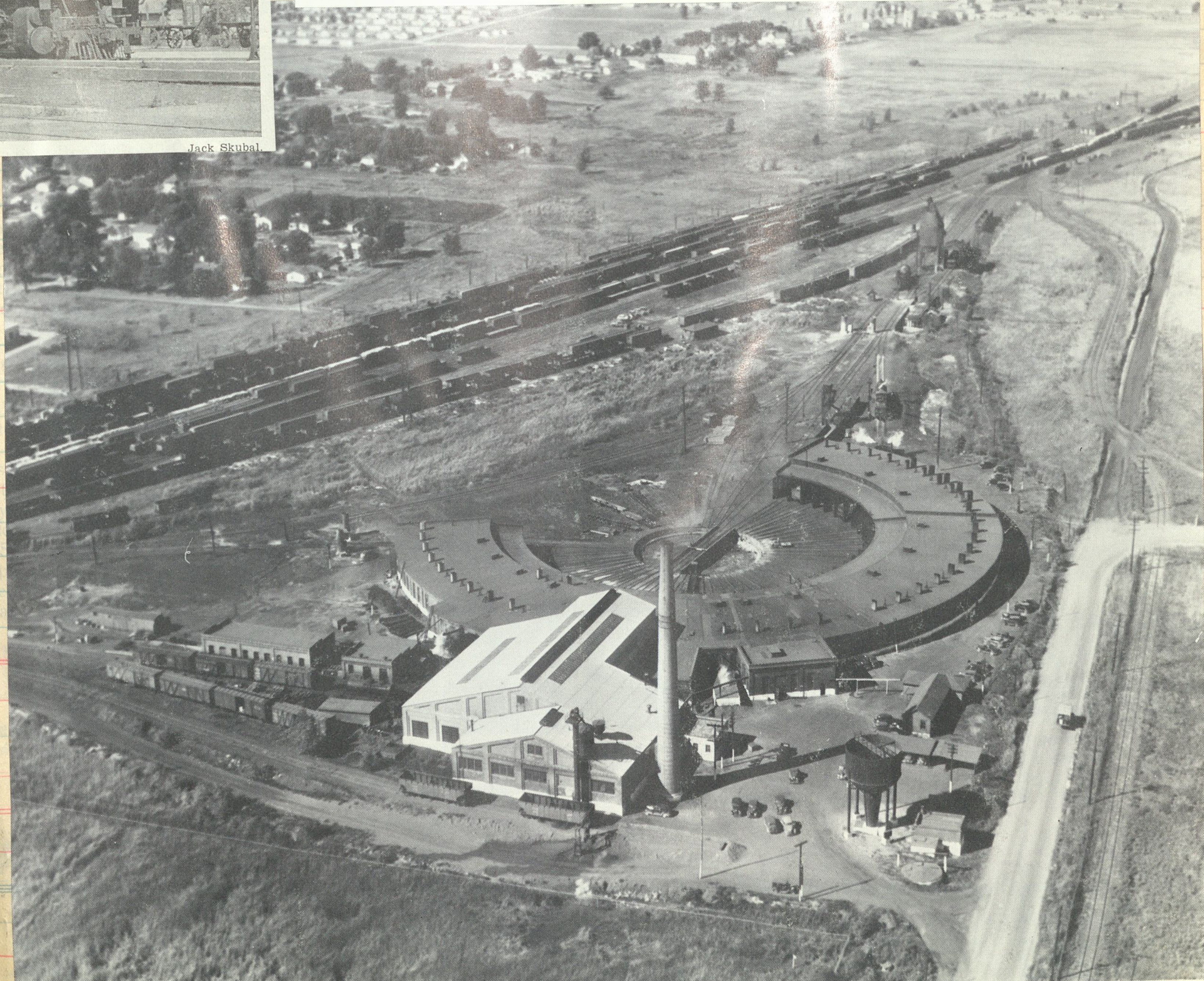
Jack Skubal



1308-1317
Schen 1906
c/n 39254

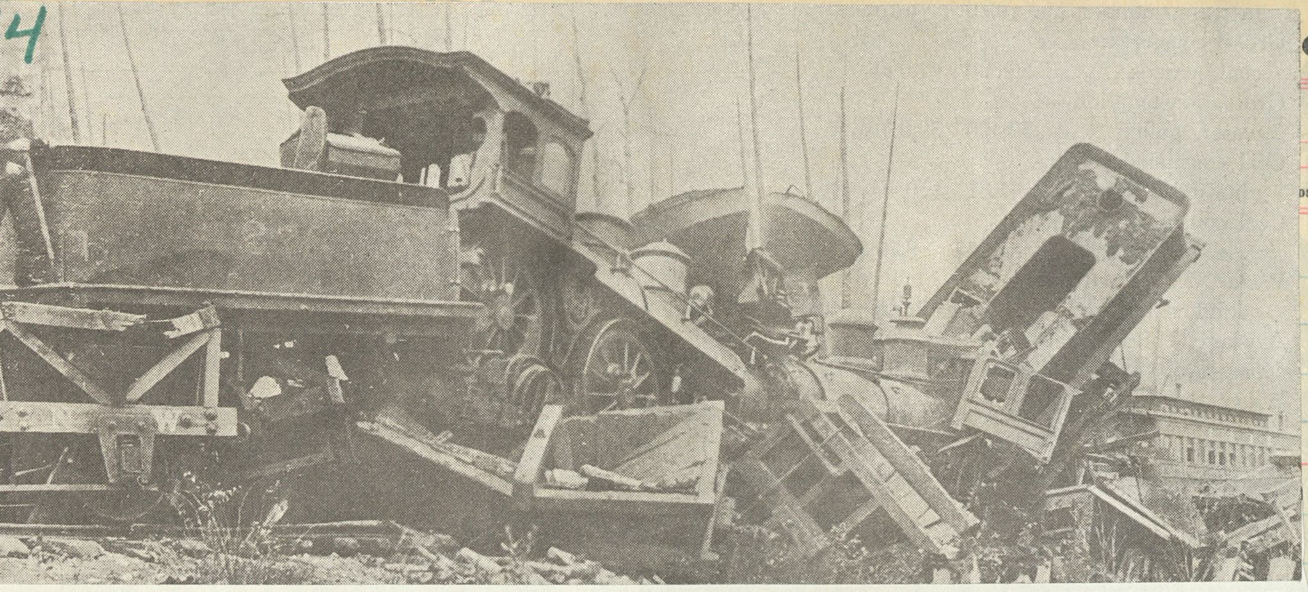


A class J 2-8-2, #2587, wheels tonnage near Geneva



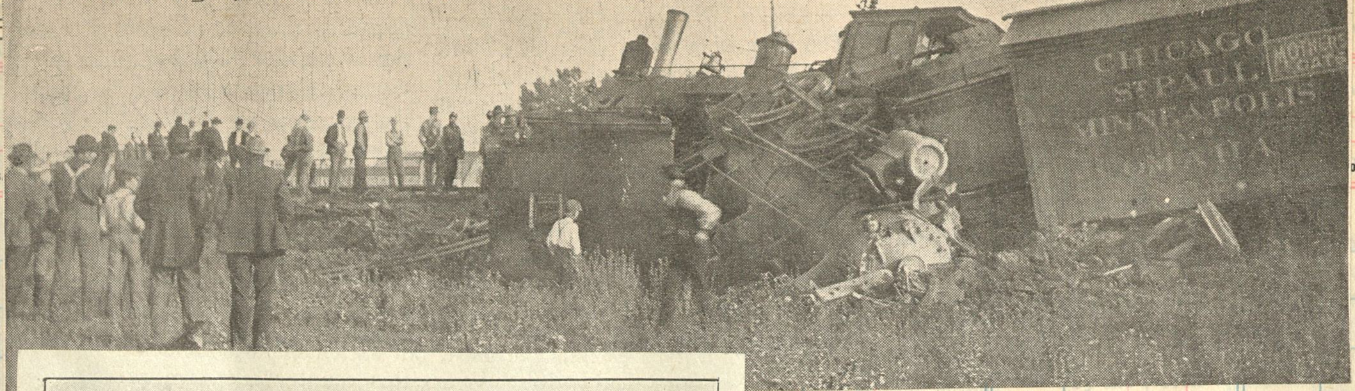
The entire North Green Bay roundhouse, shops and engine facilities are shown in this aerial view which was made on August 8, 1948. The roundhouse is of brick construction, has forty stalls and was built in 1913. The lighter colored building, also of brick construction, is the machine shop which was added in 1940. Beyond the roundhouse is the South Yard. Photo from the collection of Warren P. Mott.

4



**RRIFIC CORNFIELD MEET** took place on the Peninsula Division of the Chicago & North Western a mile west of Her-sville, Michigan, in 1881. The operating rules in effect at the time gave westbound trains the right of track for 40 utes beyond their schedule time, and on this day a schedule that operated only once a week was churning along behind NW Engine 278, a 4-4-0 built by Baldwin in 1872. Engineer Charles Seeney was at the throttle of the 278 and the weekly n was skippered by Conductor John J. Greene. The eastbound train, shown here at right, was headed by Engine No. 3 ne Winona & St. Peter Railroad, a C&NW subsidiary. This engine was known as the "Big Three," being the largest in ice on the Division; she was a 4-4-0 built by Smith & Jackson in 1862. Engineer Joseph Frozier and Conductor on Pelton overlooked the weekly westbound and this spectacular pile-up was the result. Miraculously, no one was red in the smash, probably because both crews joined the birds as the two balloon stackers bore down on each other. e the little wooden ore cars scrambled amid the wreckage. In 1882 the C&NW 278 was renumbered Winona & St. er No. 44, later becoming C&NW 1044 in 1901. The 3-Spot was scrapped about 1888. (Collection of Dr. S. R. Wood)

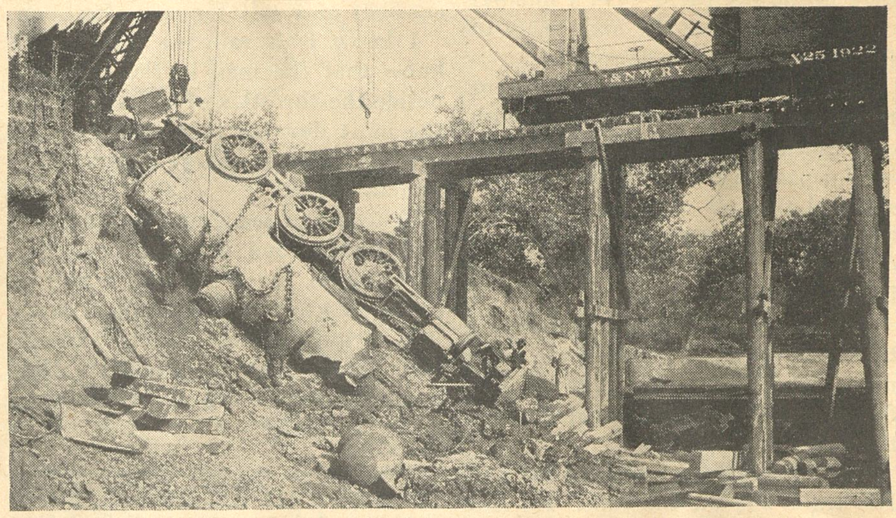
Brookings, S.D. 1902



C&NW
1922

*Photo by International*

A Derailment at Waukesha, Ill., Thought to Have Been Caused by Malicious Tampering with the Roadbed

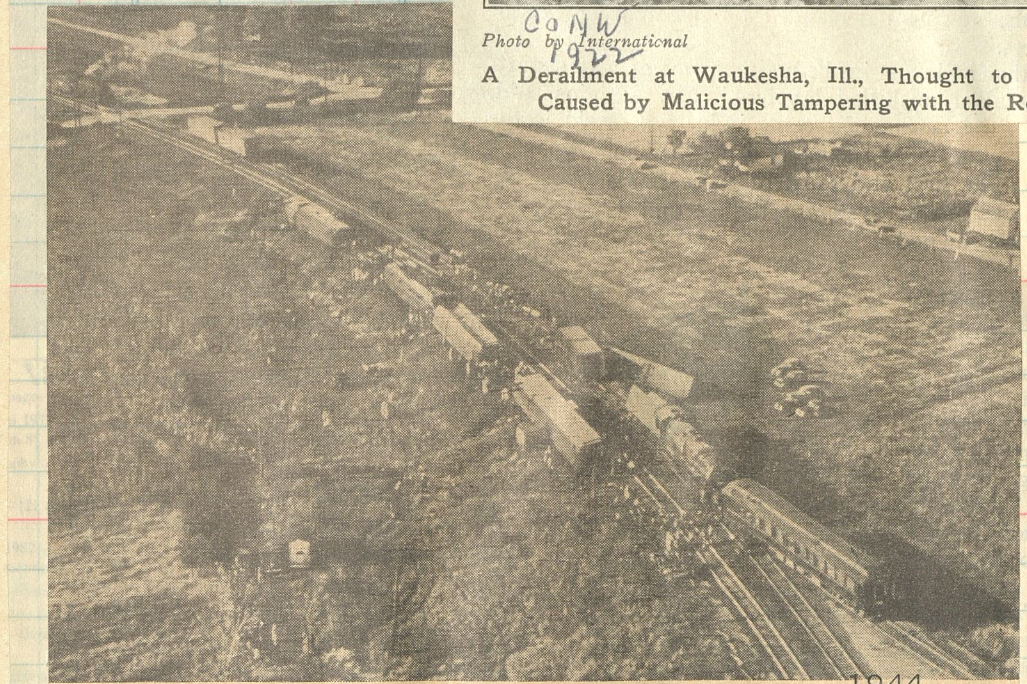


RIVER RETURNS WRECKED ENGINE

This picture was taken thirty days after the engine went crashing from the collapsed bridge into the river. The engineer, Brother Ilo Haswell, jumped to safety. At the time of the accident, the engine was under 35 feet of water.

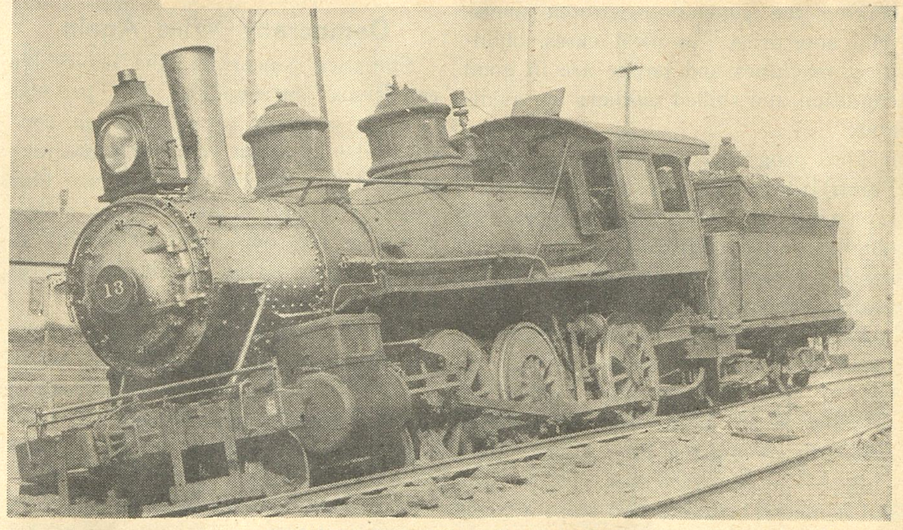
TOP PICTURE: This is what spectators saw shortly after the C. & N. W. wreck near rlington, N. D., in April, 1913, described by Brother S. C. Oviatt in his true story.

BOTTOM PICTURE: Close-up view of the crushed engine cab and window out of which other Oviatt hung like on a trapeze.



1944

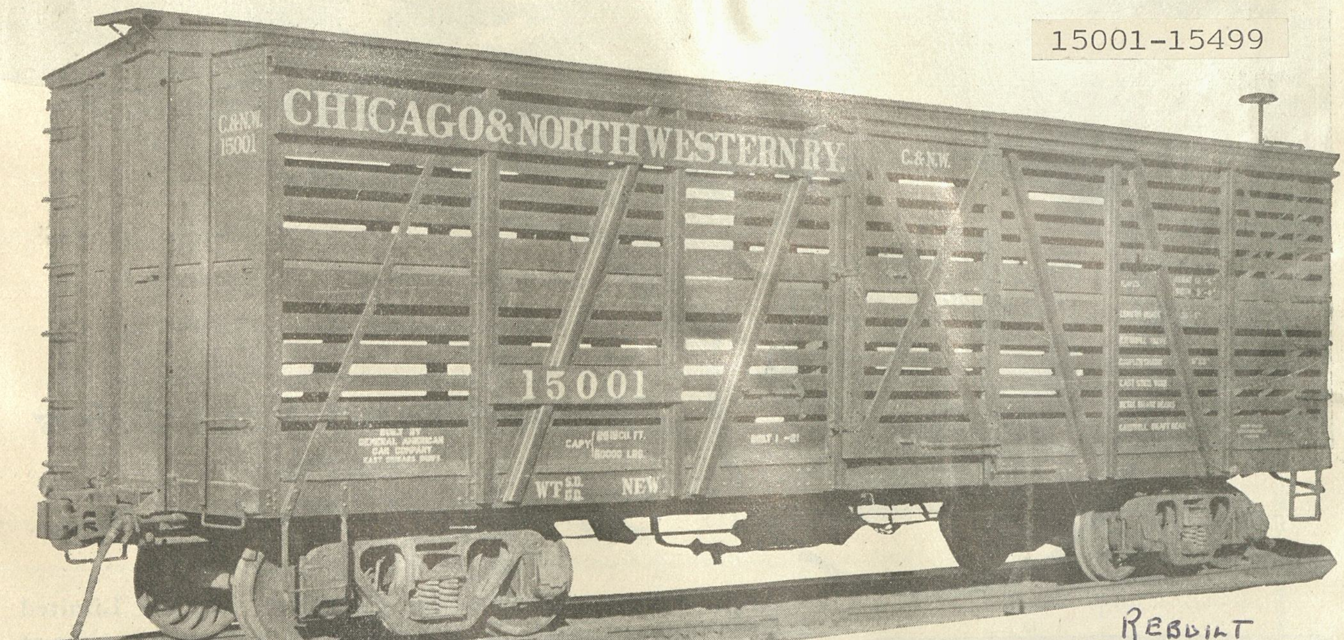
CORNFIELD MEET. Cars were strewn around switch at Missouri Valley, Iowa, last September 28th when C&NW passenger and freight trains came together.



"UNLUCKY 13" ON THE GROUND

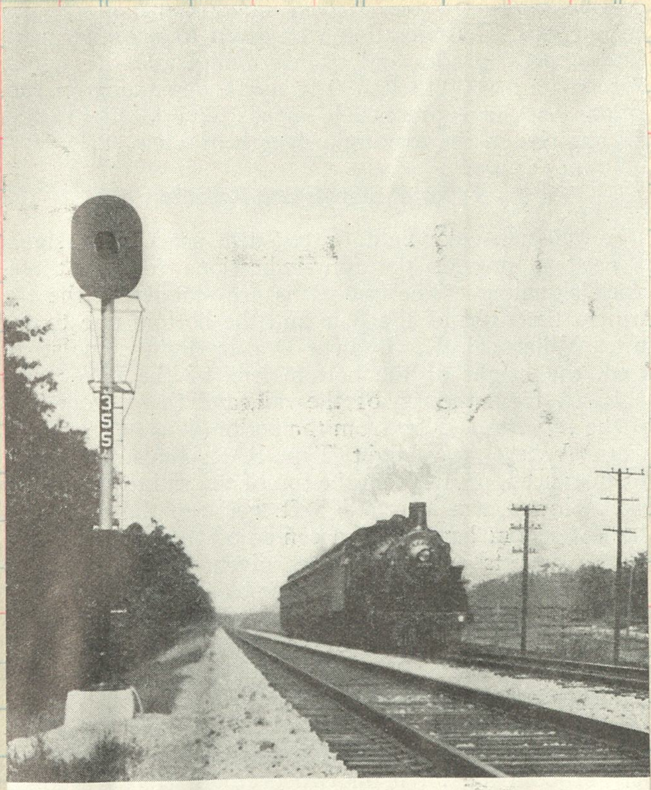
The ill-starred old Chicago & Northwestern engine was used on the Pierre-Rapid City construction train in 1907. It had 18 by 26 inch cylinders. Brother T. E. Thomas, retired, Div. 213, was the engineer and Brother J. F. Grace, Div. 213, fireman, on this train used in building the line in 1907.

15001-15499



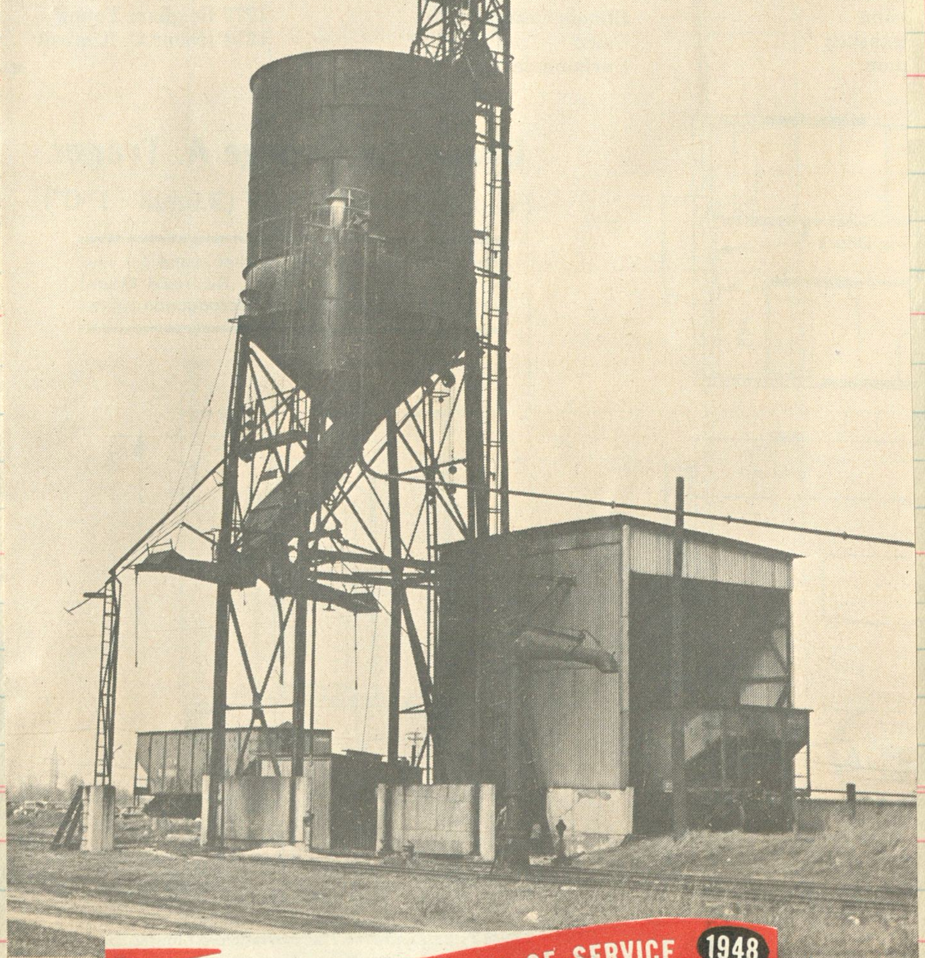
Standard 40 Ton Stock Car

REBUILT
JAN 1921

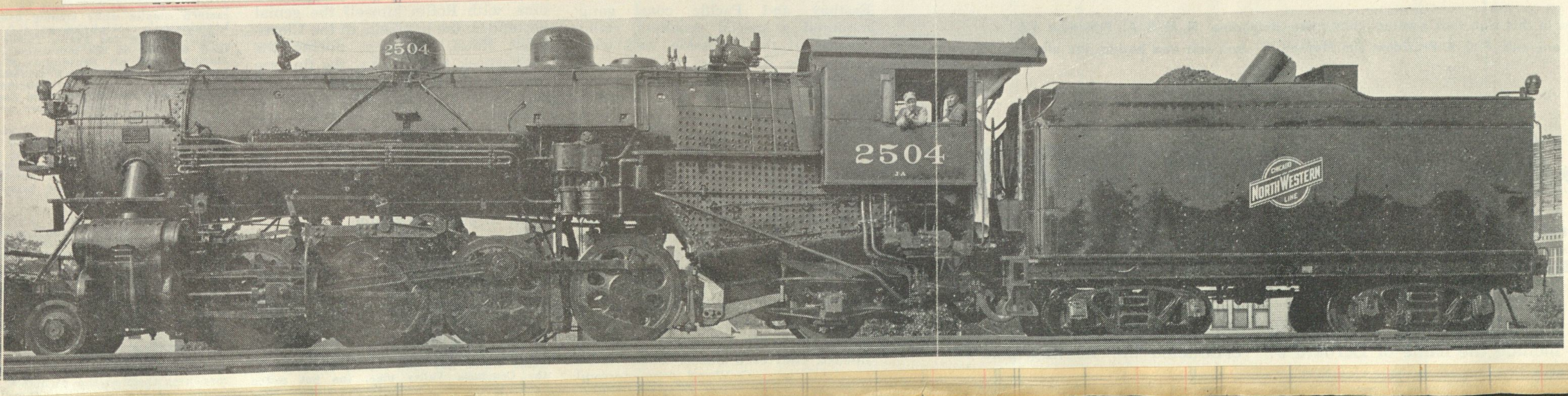


Searchlight Signal Location on Three-Aspect Territory

Coaling station
Butler, Wis



Everything is up to date on the NorthWestern. Witness the 2504, a Mike delivered by Richmond in 1921, sporting box-pox drivers along with other improvements as rebuilt in 1936.



1848 ONE HUNDRED YEARS OF SERVICE 1948

*Serving the*

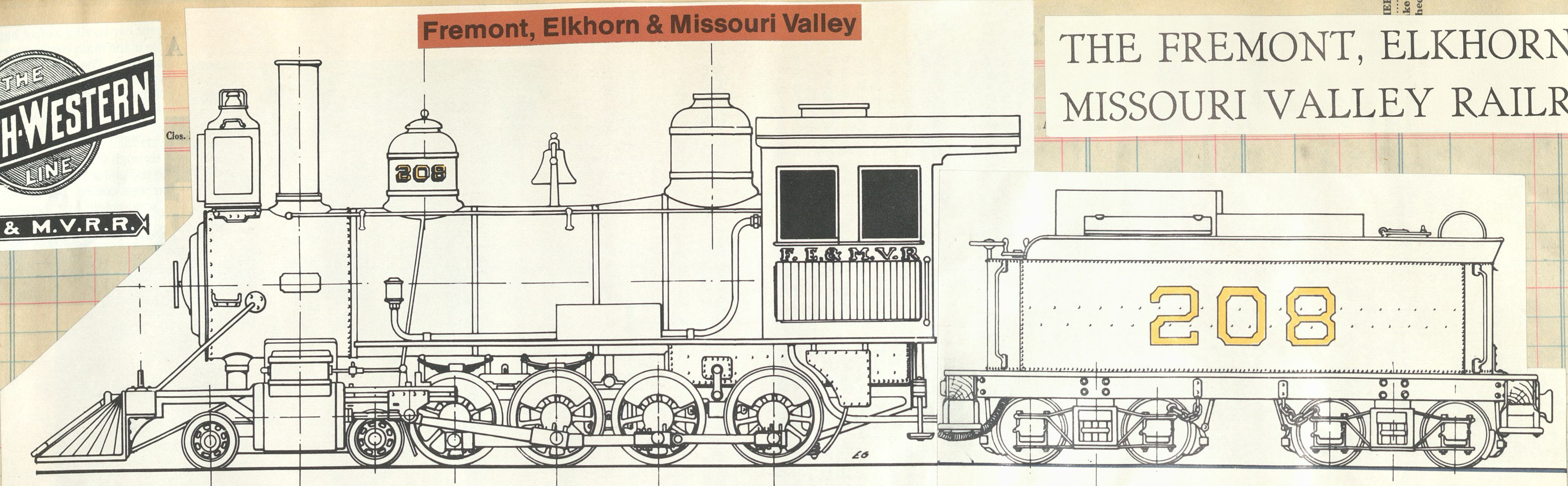
**WEST, NORTHWEST**
**PACIFIC COAST**

★

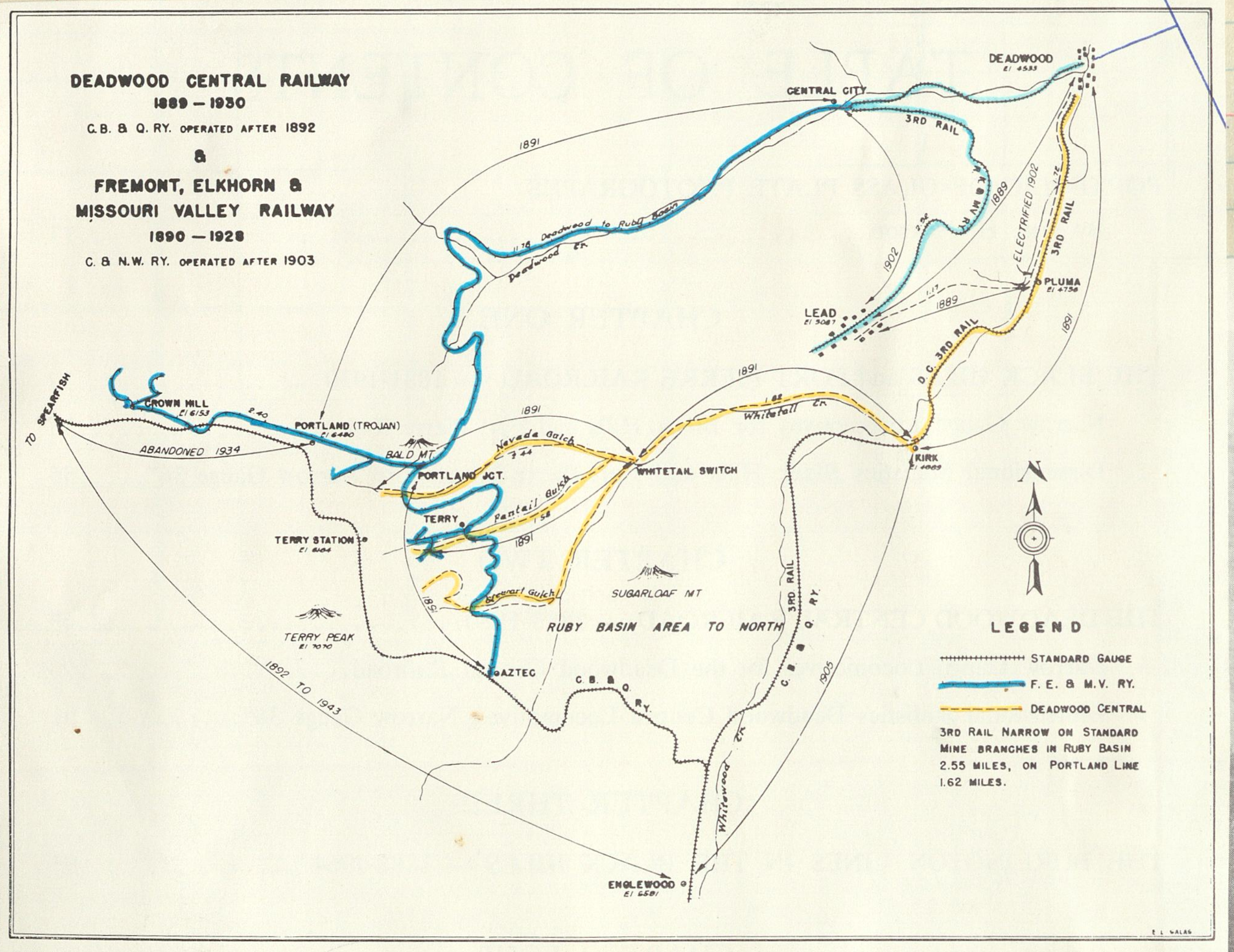
# THE FREMONT, ELKHORN AND MISSOURI VALLEY RAILROAD

THE NORTH-WESTERN LINE
F. E. & M. V. R. R.

**Fremont, Elkhorn & Missouri Valley**


208
F. E. & M. V. R.
208
EG

4-8-0's were unusual for narrow gauge but the FE&MV had five of them at one time. The 208 was one of two built at Schenectady 1891, c/n 3421. Another was delivered in 1892 and two more in 1902. The 208 was renoed C&NW #64 in 1905.


DEADWOOD CENTRAL RAILWAY
1889 – 1930
C. B. & Q. RY. OPERATED AFTER 1892
&
FREMONT, ELKHORN & MISSOURI VALLEY RAILWAY
1890 – 1928
C. & N.W. RY. OPERATED AFTER 1903
DEADWOOD
El 4533
CENTRAL CITY
3RD RAIL
1891
Deadwood to Ruby Basin
Deadwood Cr.
F. E. & M.V. RY.
1889
1902
ELECTRIFIED 1902
3RD RAIL
PLUMA
El 4738
LEAD
El 5087
1889
D.C. 3RD RAIL
1891
Whitetail Cr.
KIRK
El 4889
TO SPEARFISH
CROWN HILL
El 6153
PORTLAND (TROJAN)
El 6480
ABANDONED 1934
BALD MT.
PORTLAND JCT.
Nevada Gulch
WHITETAIL SWITCH
TERRY
Fantail Gulch
TERRY STATION
El 6164
Stewart Gulch
SUGARLOAF MT
RUBY BASIN AREA TO NORTH
TERRY PEAK
El 7070
AZTEC
C. B. & Q. RY.
3RD RAIL
C. B. & Q. RY.
1905
Whitewood Cr.
1892 TO 1943
ENGLEWOOD
El 6581
LEGEND
STANDARD GAUGE
F. E. & M. V. RY.
DEADWOOD CENTRAL
3RD RAIL NARROW ON STANDARD MINE BRANCHES IN RUBY BASIN 2.55 MILES, ON PORTLAND LINE 1.62 MILES.
E. L. GALAS

Rare indeed was narrow gauge 4-8-0's

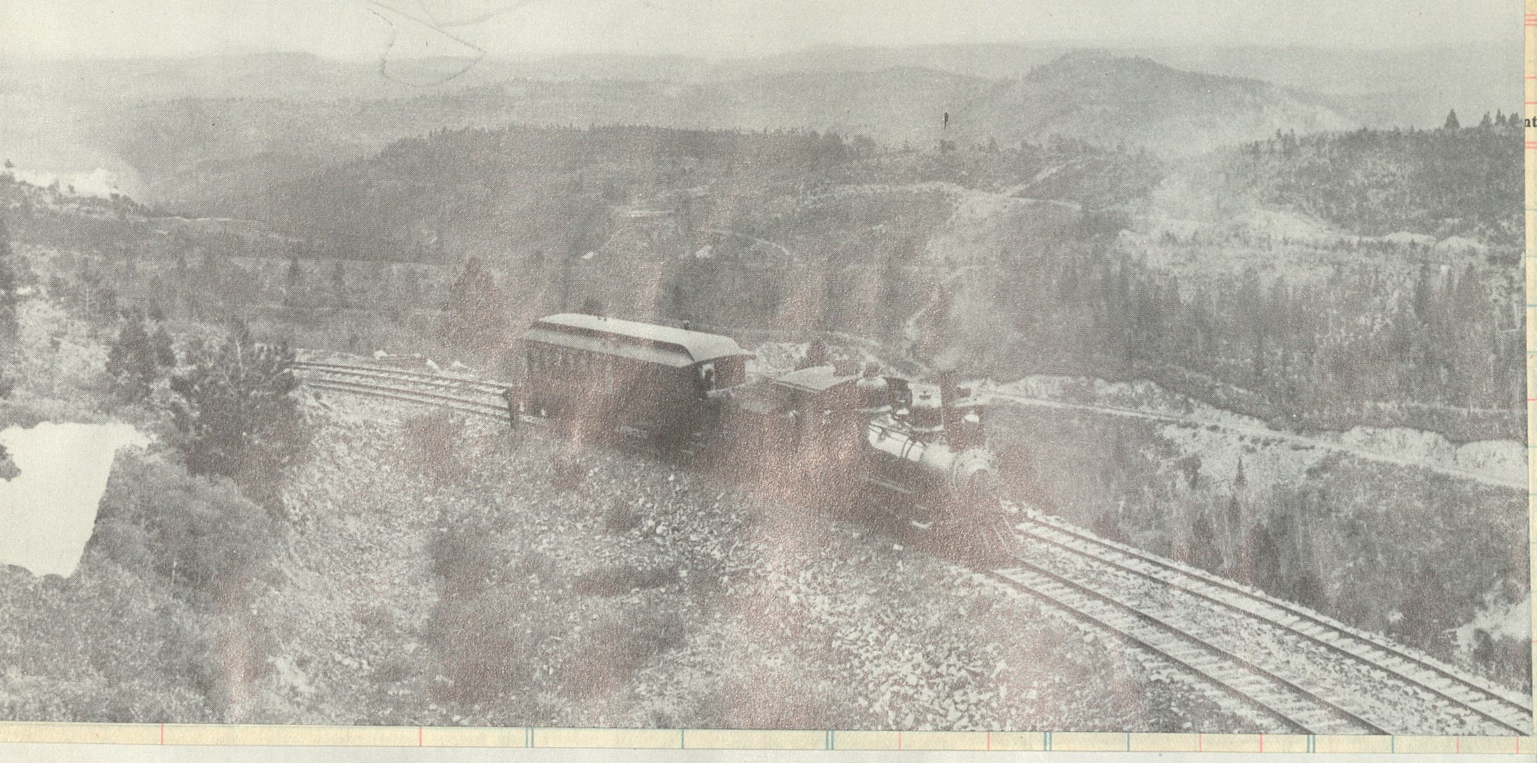
ELKHORN & MISSOURI VALLEY

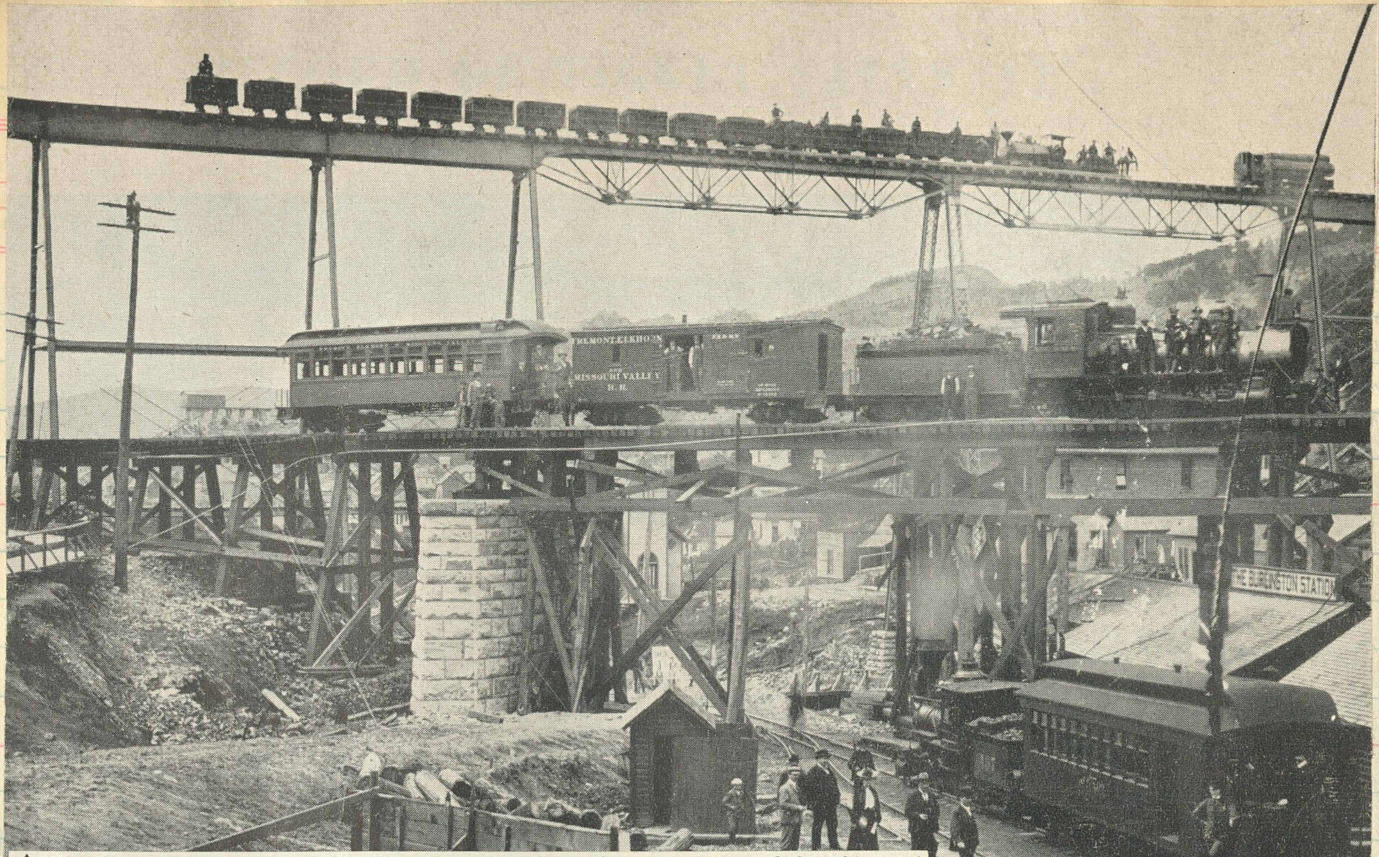
Excursion party of William H. Jackson, noted early western photographer

**THE ELKHORN PASSENGER TRAIN, ENGINE #208**, around 1902, descending around the side of the hill above Pluma on its way to Central City from Lead City. A ride on the train was considered a gala affair, enjoyed by excursionists as well as genuine travelers.

A deep cut and high fill near Portland

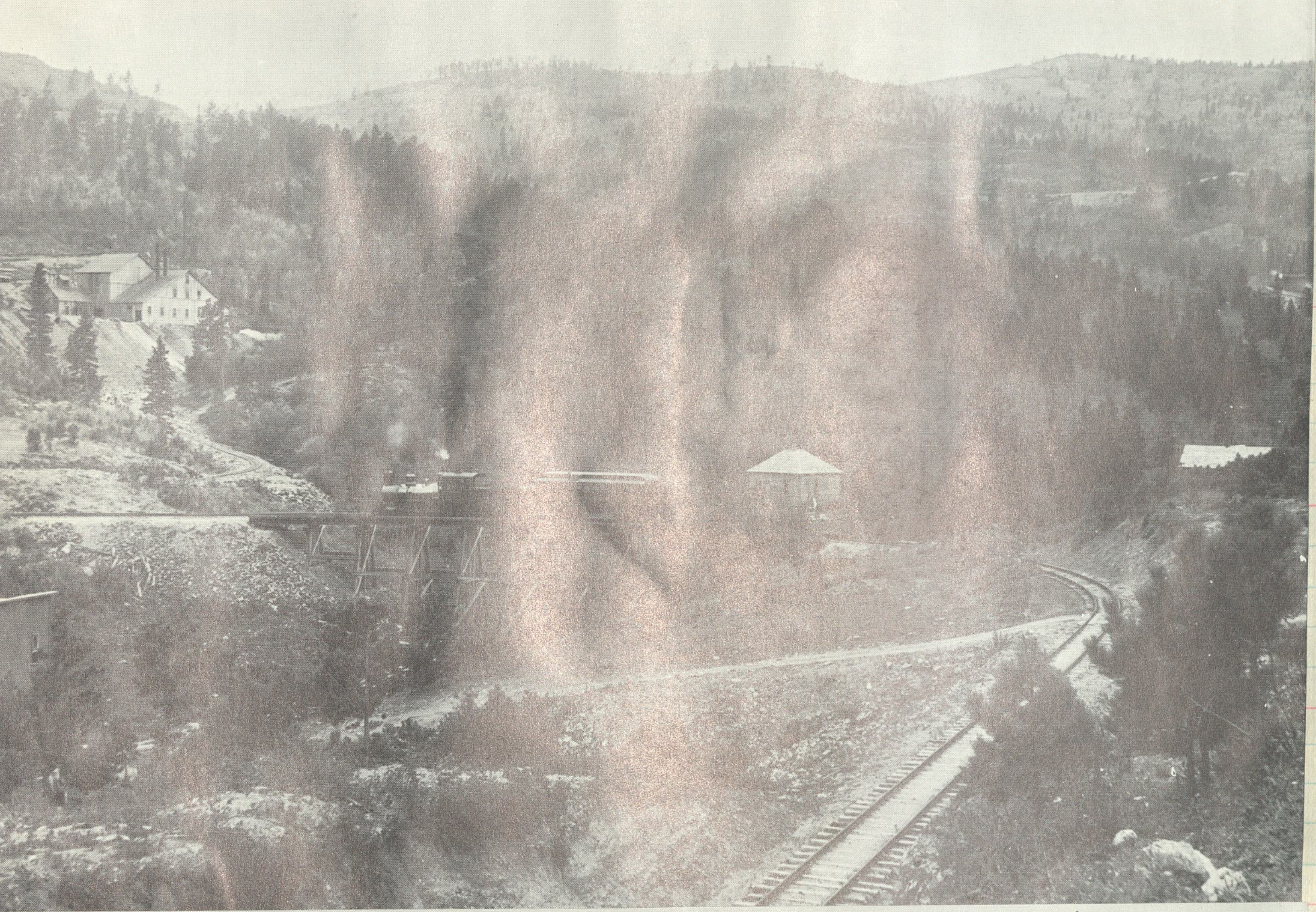
Train at Portland Jct headed for Crown Hill. The right hand track went down into Nevada Gulch, along hillside in background and on to Terry.



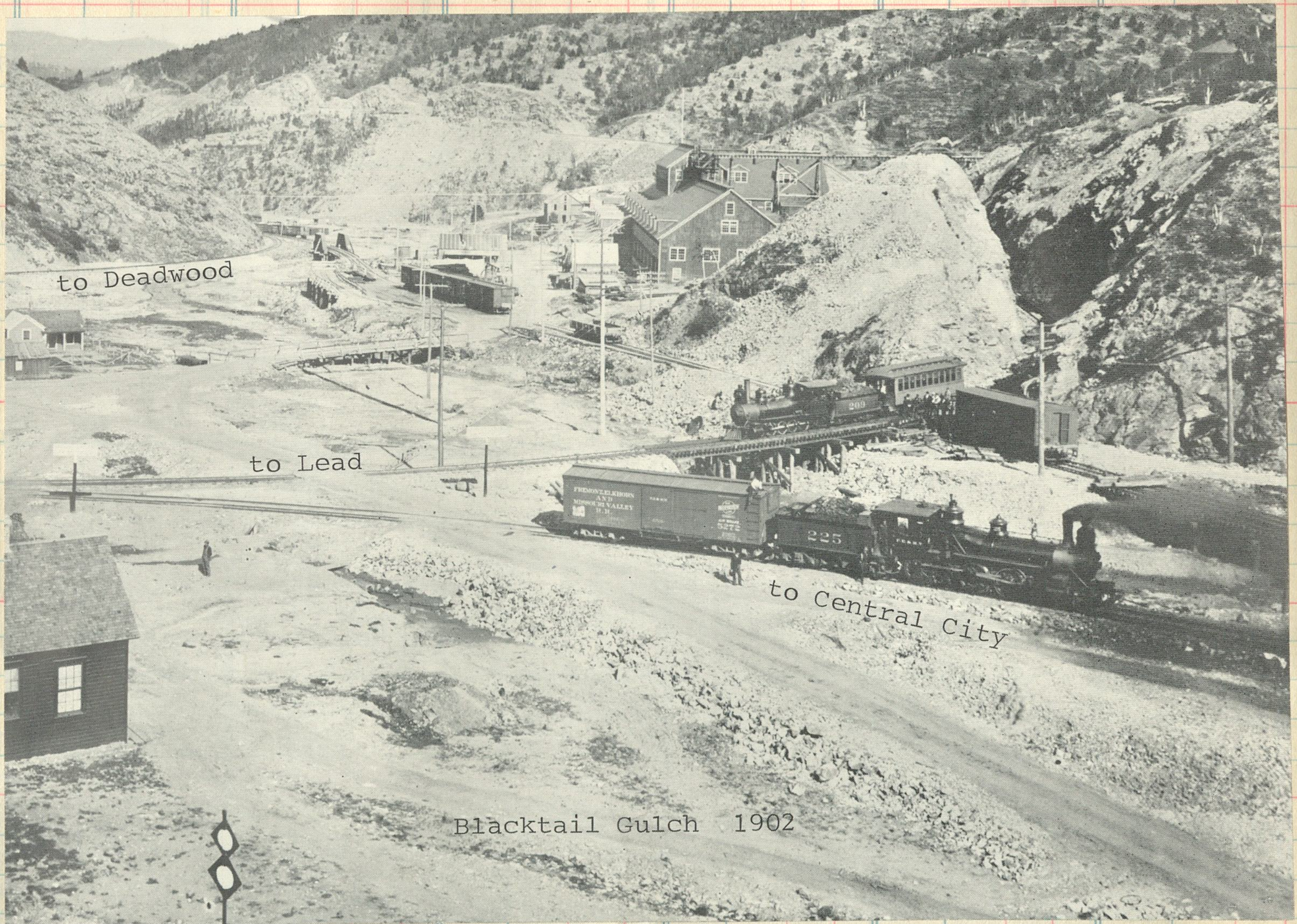


↑Both the middle-level Fremont, Elkhorn & Missouri Valley Railroad (now part of the Chicago & North Western) and the low-level Burlington Route were attracted to Lead, S. Dak., by the golden traffic of the fabulous Homestake Mining Company, whose ore train stands high on the spindly trestle in this posed photo taken in the early 1900's.

Sold Amount

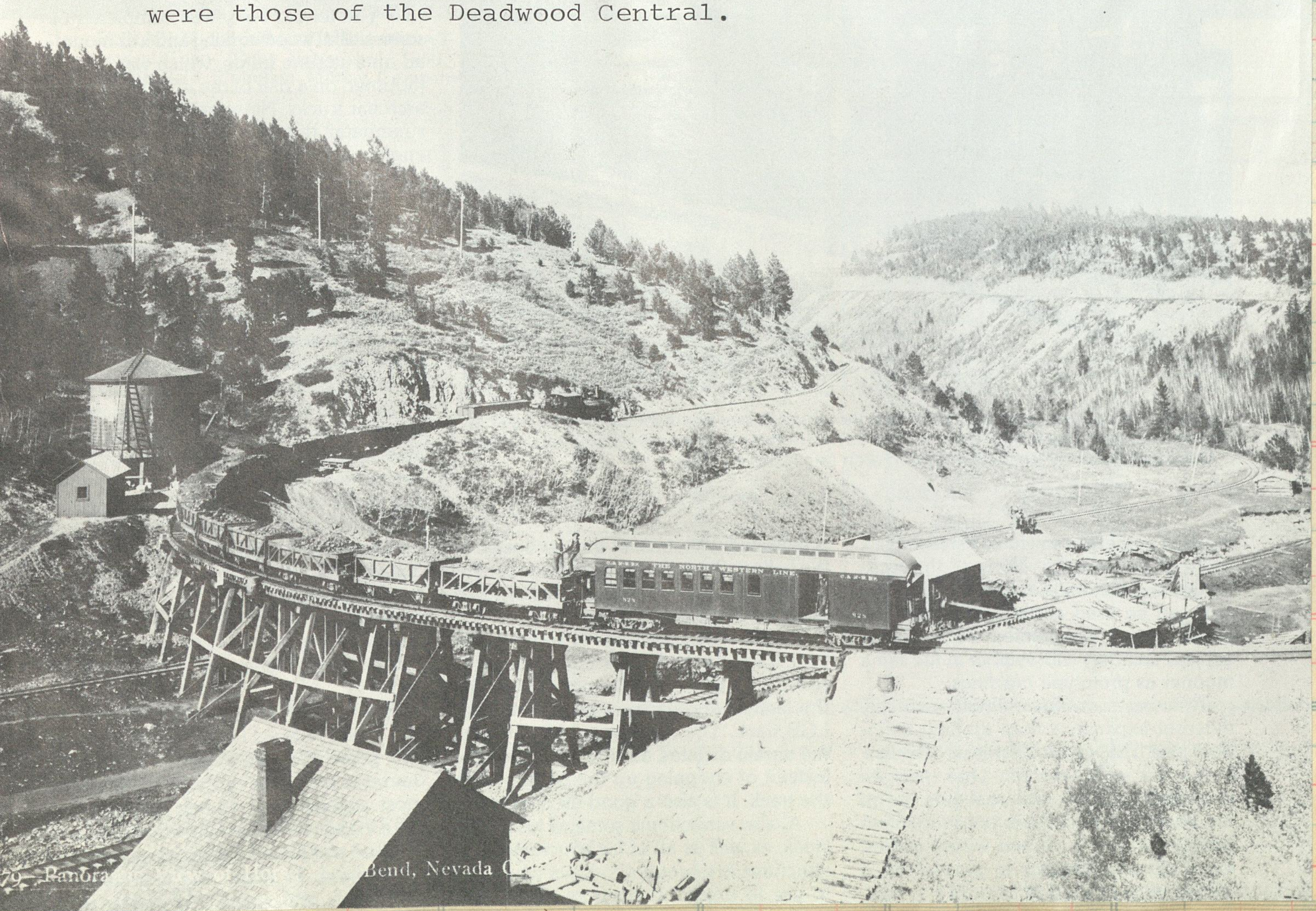


rain is crossing trestle over Nevada Gulch on its way to Terry with the Mogul ine on the hillside. The line going to Crown Hill can be noted, on the right, bout half way up the hill.

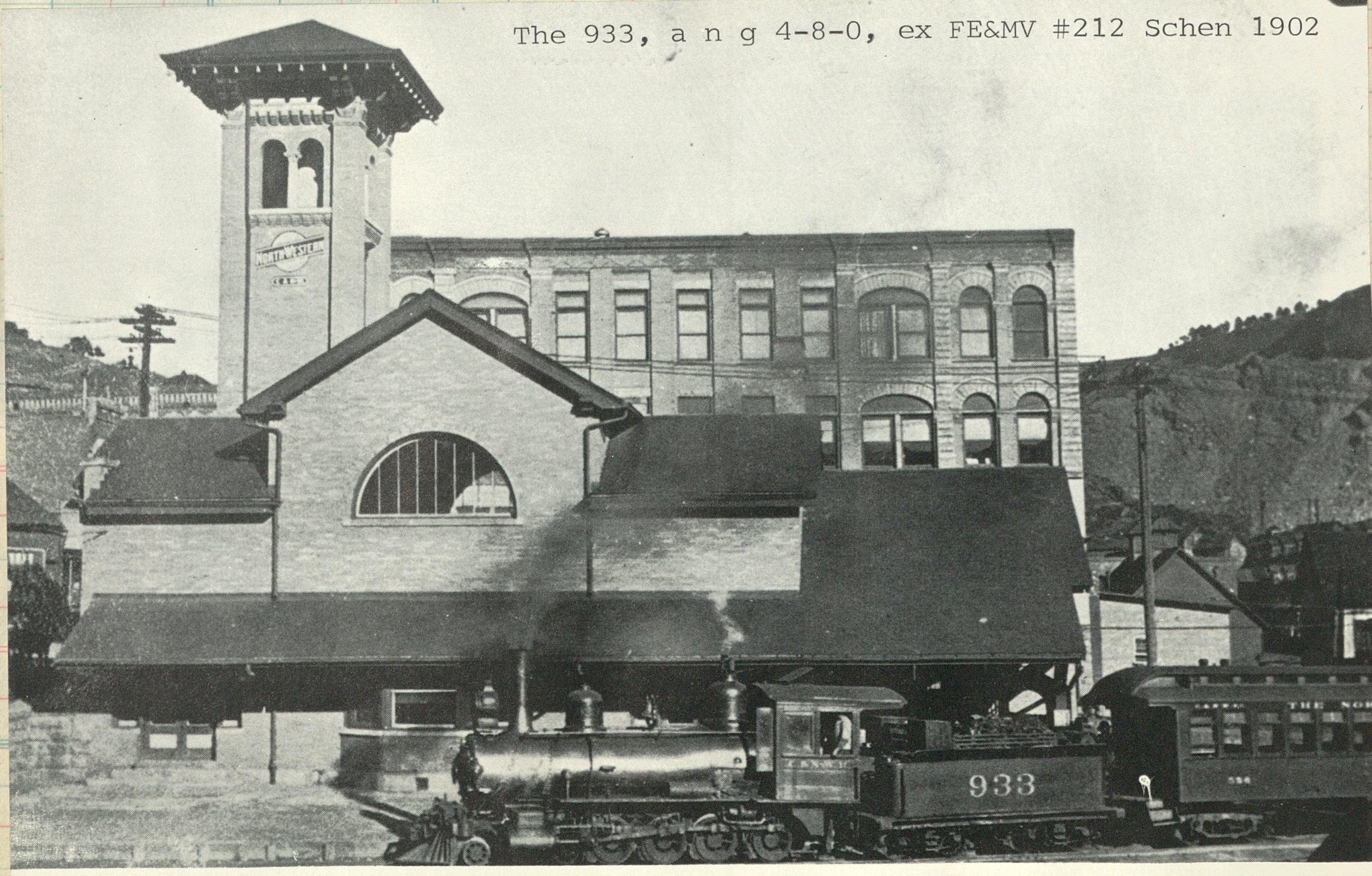


Blacktail Gulch 1902

Crossing Nevada Gulch headed for Portland Jct. Tracks under the trestle were those of the Deadwood Central.



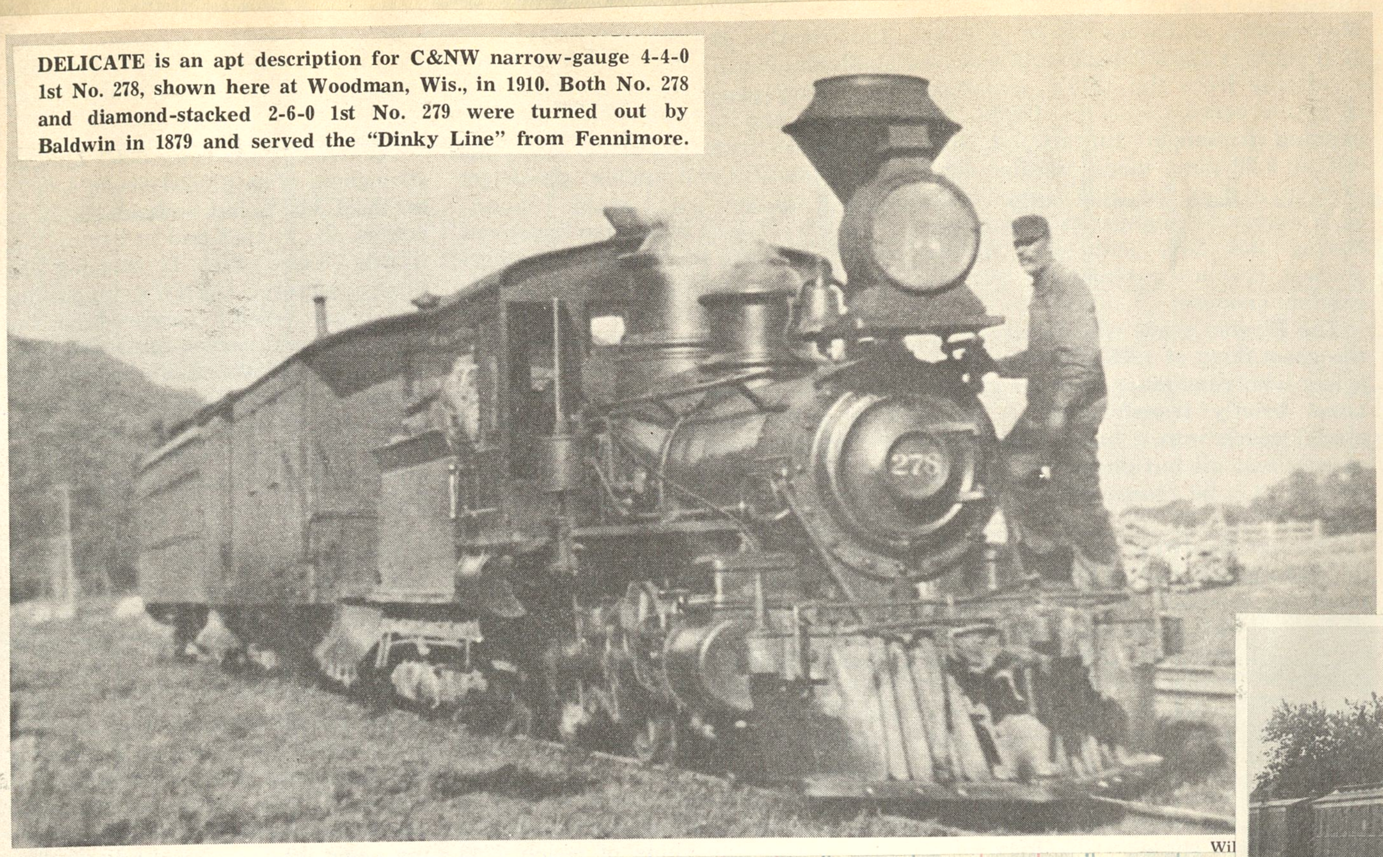
The 933, a n g 4-8-0, ex FE&MV #212 Schen 1902

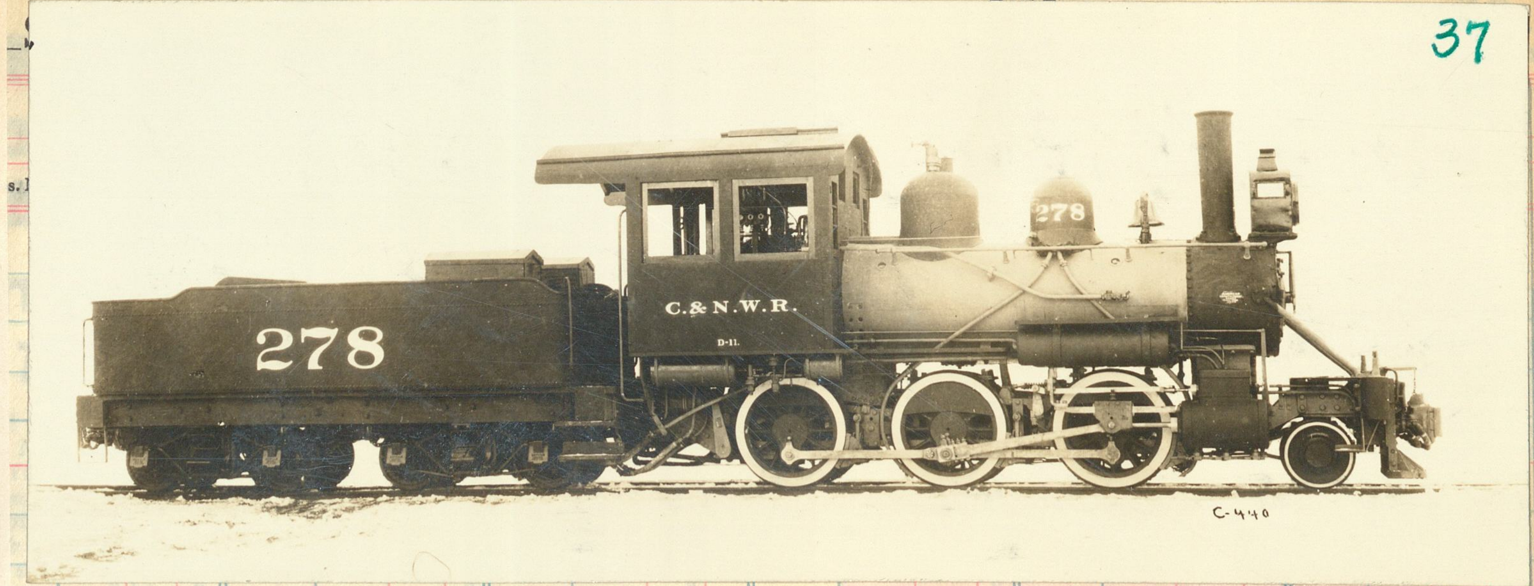


**THE CHICAGO & NORTH WESTERN** renumbered the Elkhorn engines in January 1905 to Numbers 64, 410, 468, 477, and 933. Here the C&NW engine No. 933 is pulling up to the Lead depot with passenger train, Oct. 11, 1906.

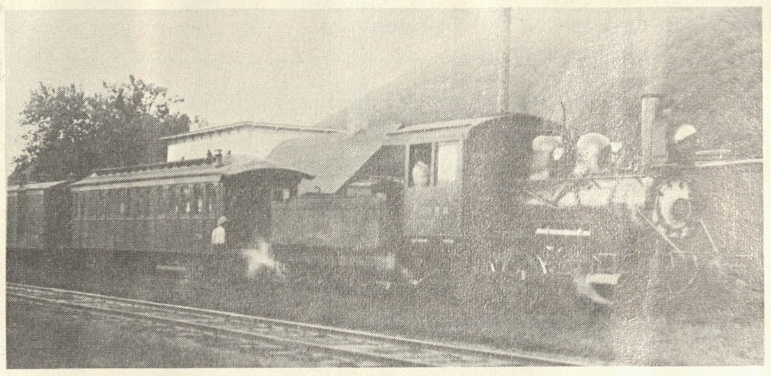
37

**DELICATE** is an apt description for C&NW narrow-gauge 4-4-0 1st No. 278, shown here at Woodman, Wis., in 1910. Both No. 278 and diamond-stacked 2-6-0 1st No. 279 were turned out by Baldwin in 1879 and served the "Dinky Line" from Fennimore.

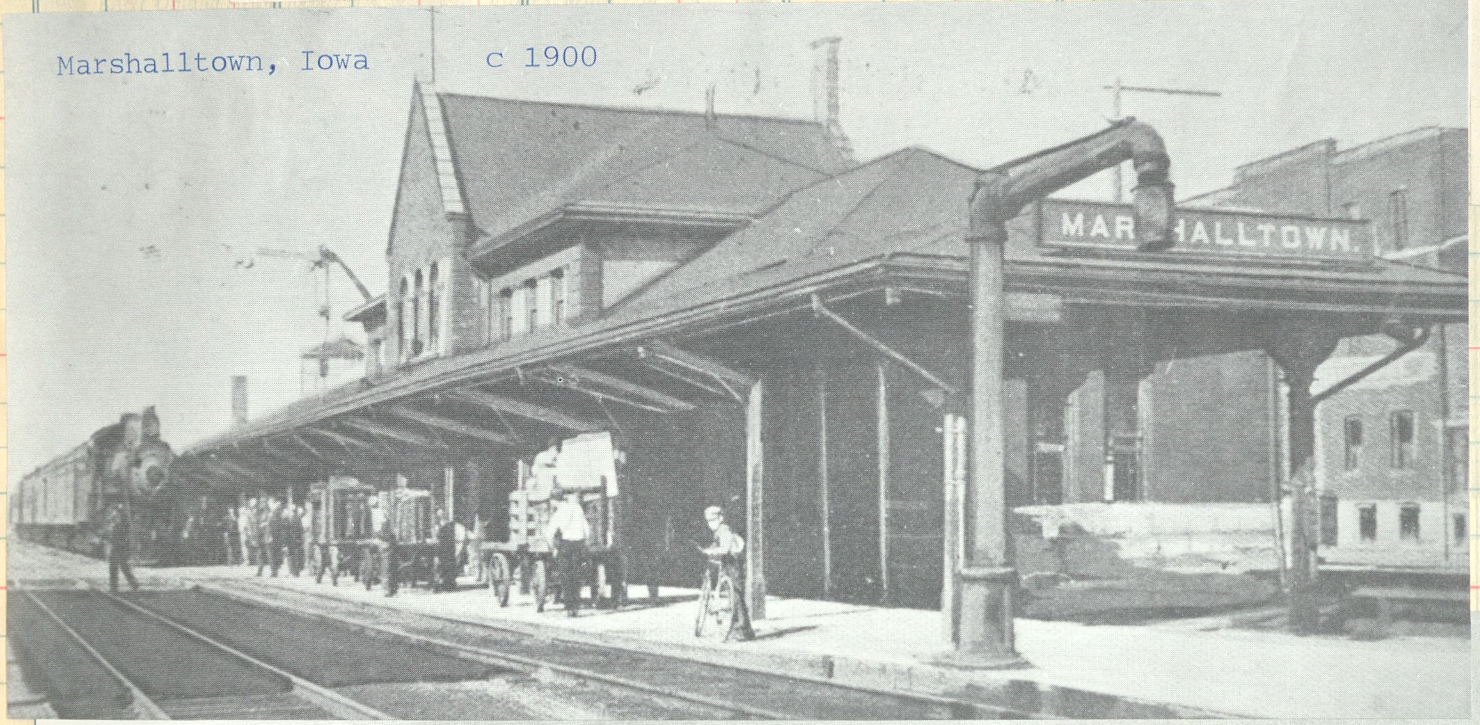




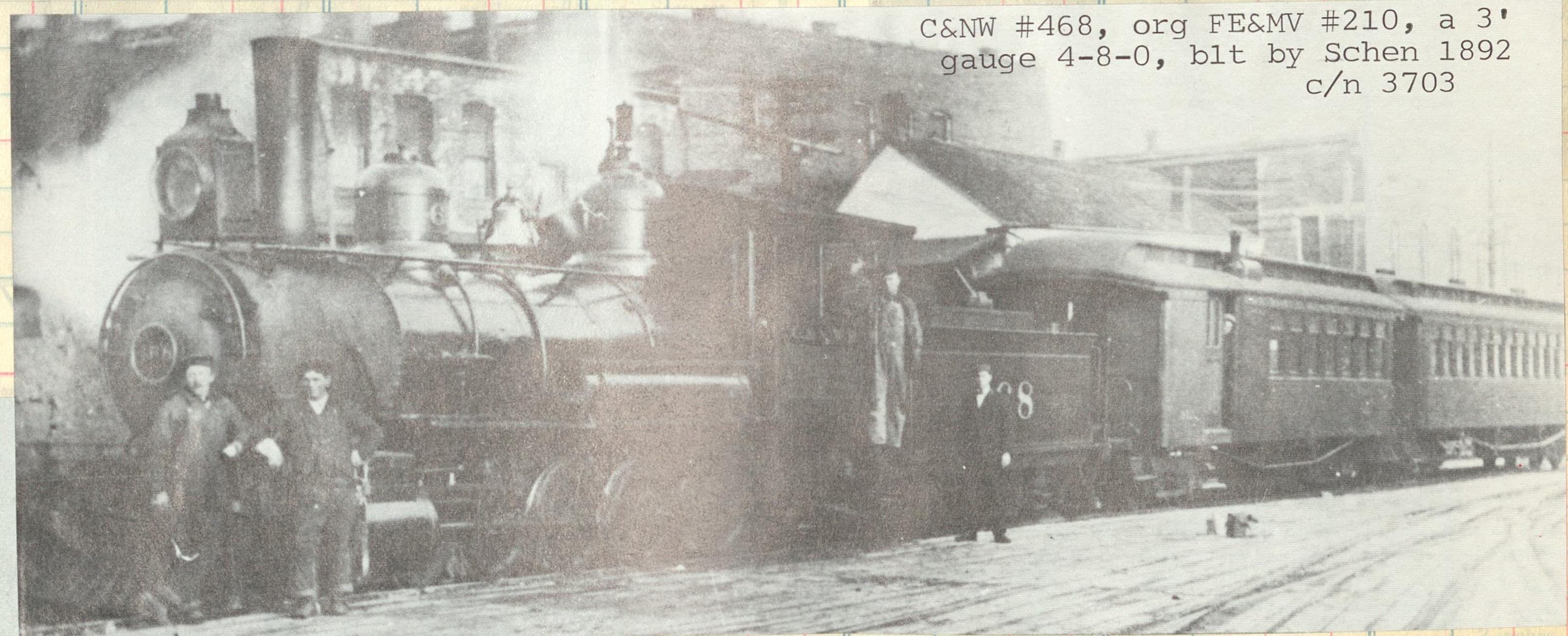
The boys at the Cooke Works had to have been proud of their handiwork when this enticing little coffeepot rolled out of the erection shed in March 1916. Weighing 50 ton she was 45' long and 12' high. Cyls 11x18, dvs 45", T F 6460#. Was 2nd 278, c/n 55533. Tank carried 4 ton coal and 8000 gals water. The last narrow-gauge engine for the C&NW. Retired 1927



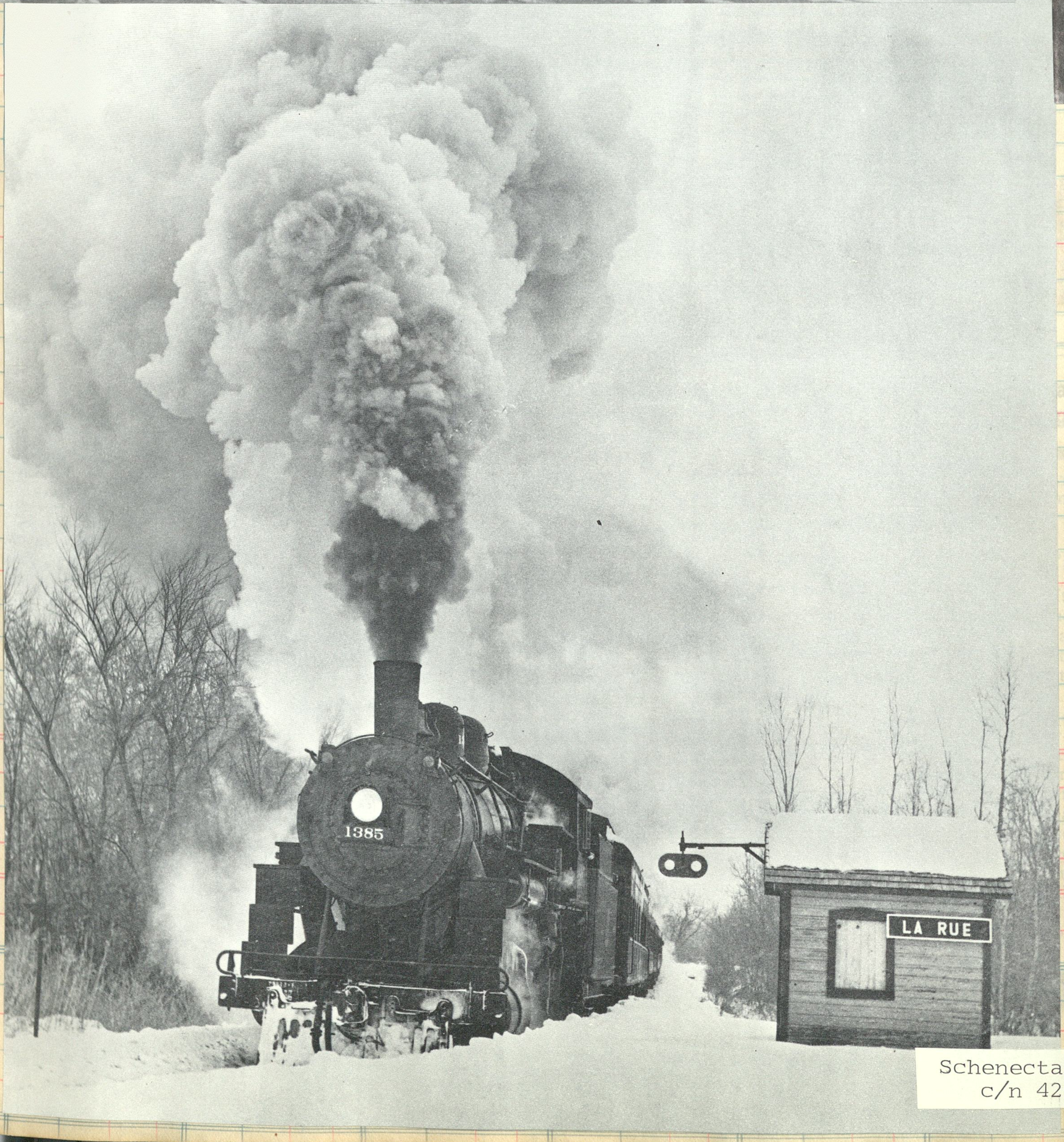
**NARROW-GAUGE** 2-6-0 2nd No. 279, built by Schenectady in 1912 to replace 1st No. 279, went to Nevada's Pioche Pacific Railroad in 1927.



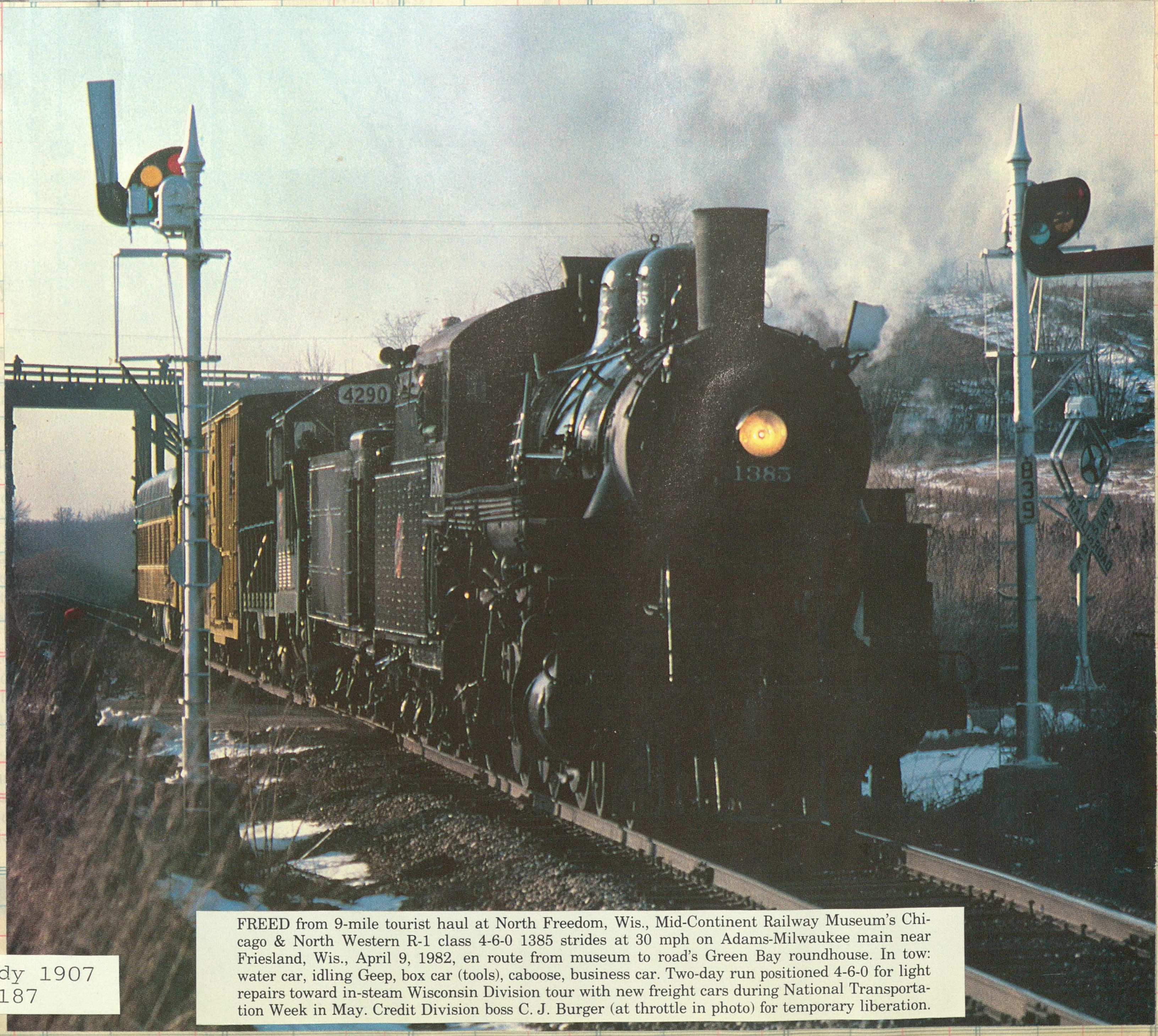
Marshalltown, Iowa c 1900



C&NW #468, org FE&MV #210, a 3' gauge 4-8-0, blt by Schen 1892 c/n 3703



Schenectady 1907
c/n 42187



FREED from 9-mile tourist haul at North Freedom, Wis., Mid-Continent Railway Museum's Chicago & North Western R-1 class 4-6-0 1385 strides at 30 mph on Adams-Milwaukee main near Friesland, Wis., April 9, 1982, en route from museum to road's Green Bay roundhouse. In tow: water car, idling Geep, box car (tools), caboose, business car. Two-day run positioned 4-6-0 for light repairs toward in-steam Wisconsin Division tour with new freight cars during National Transportation Week in May. Credit Division boss C. J. Burger (at throttle in photo) for temporary liberation.

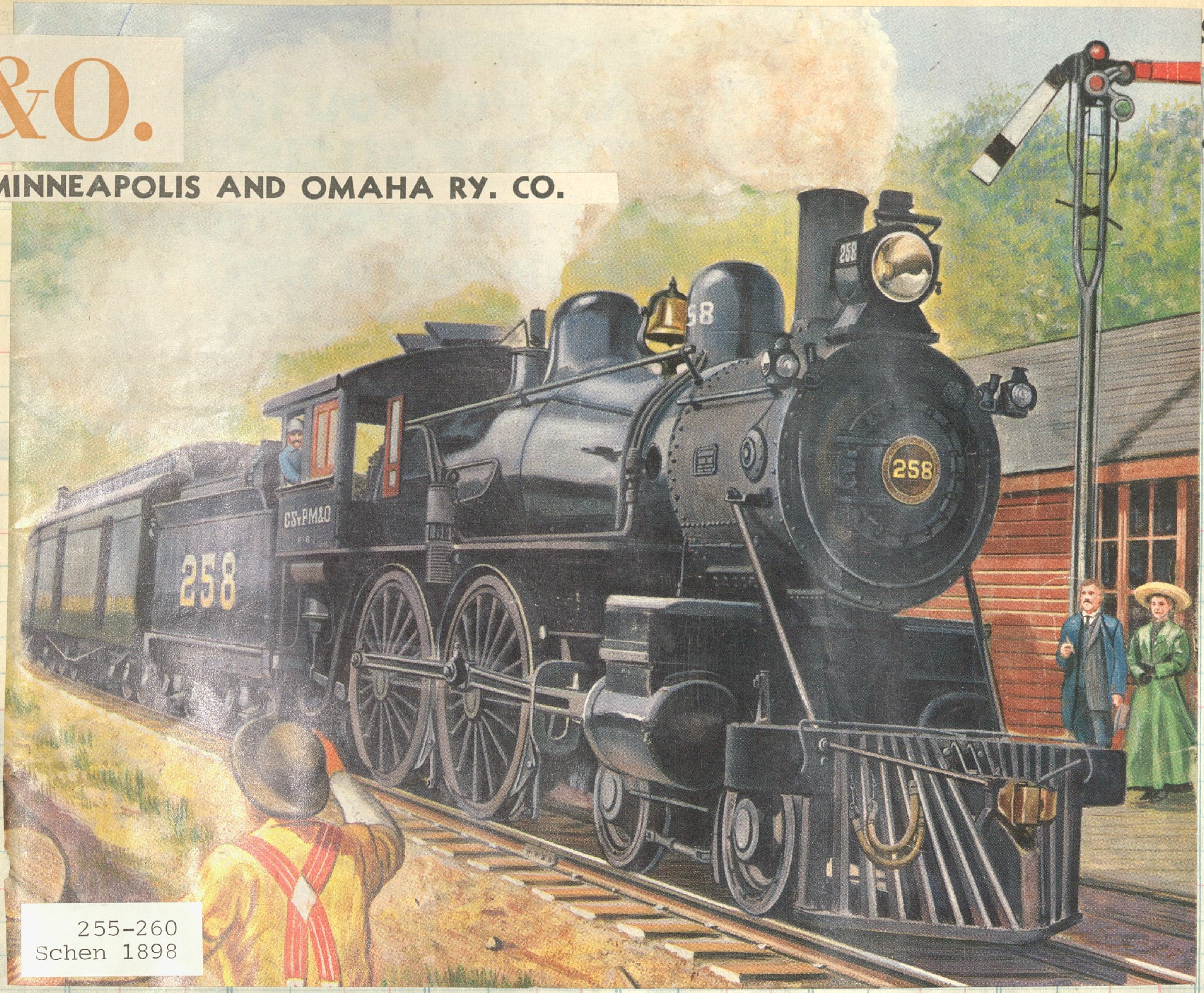
# C.St.P.M.&O.

## CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RY. CO.

## HE OMAHA ROAD

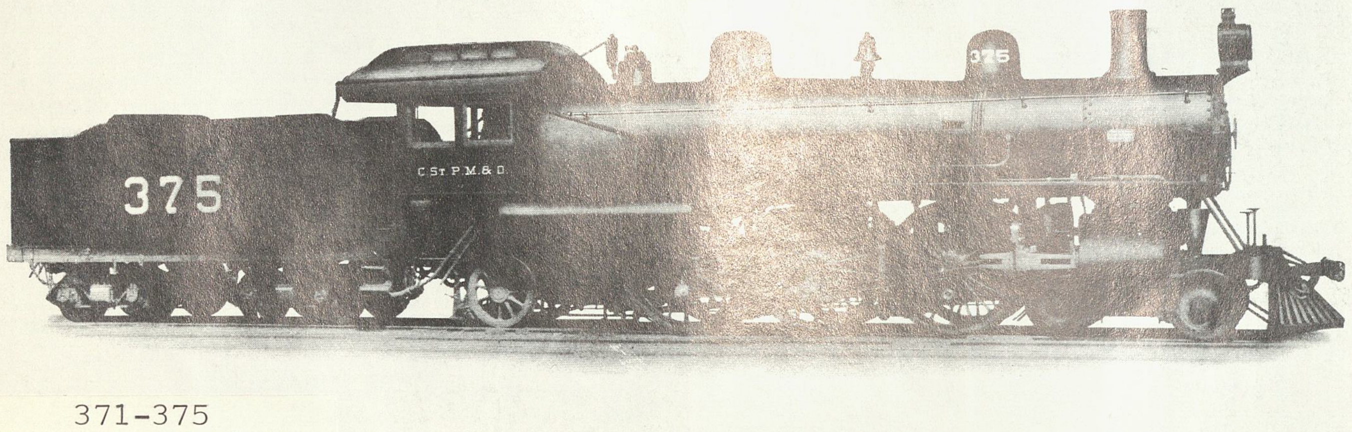
CHICAGO AND NORTH WESTERN SYSTEM

In 1927 was operating 1,747 miles,
with 387 engines, 12,065 freight
and 333 passenger cars



255-260
Schen 1898

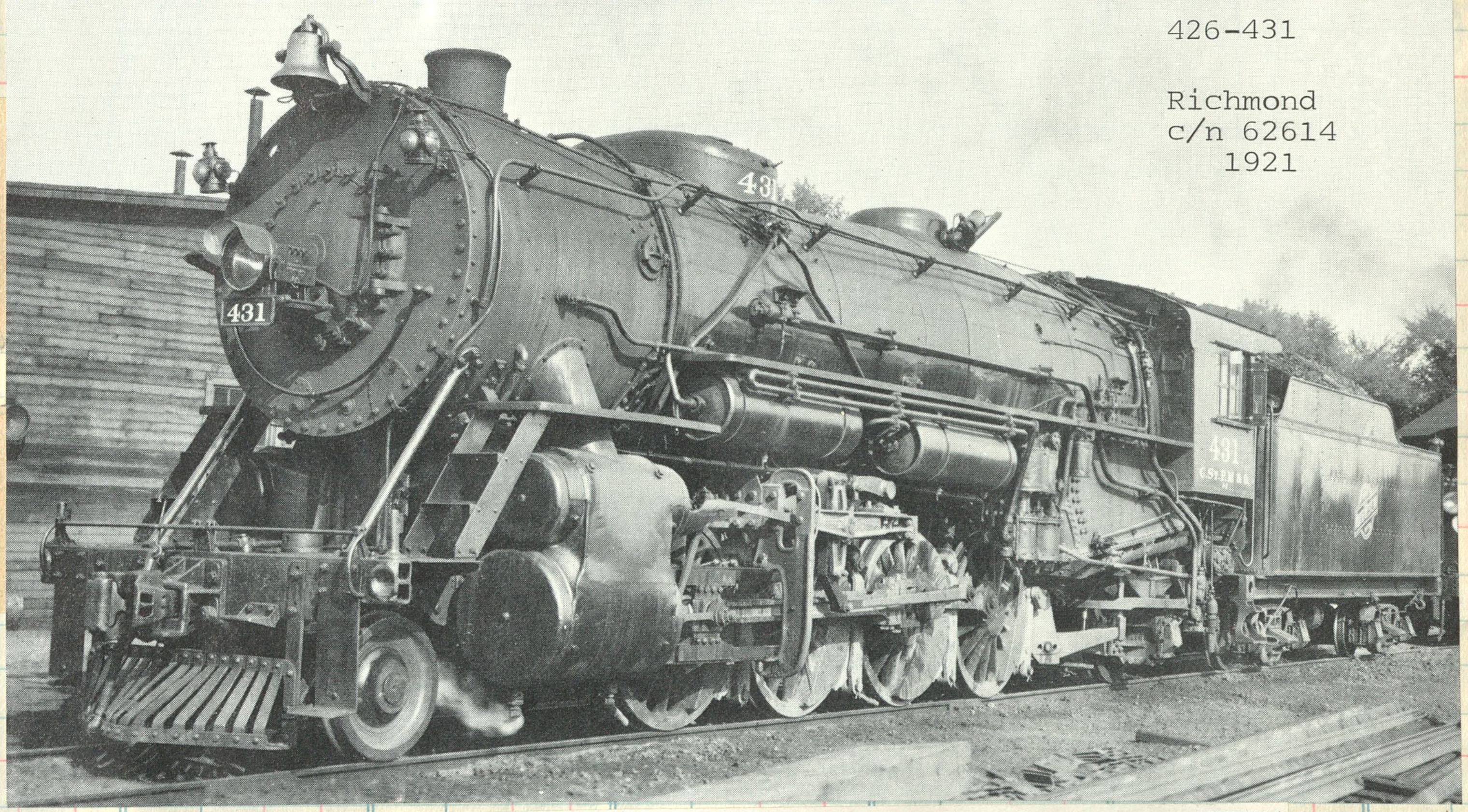
*PRAIRIE WINTER posed problems. Ten-Wheeler pushes a Russell wedge plow into Winside, Nebr., in winter of 1949-1950.*



371-375
Schenectady 1903
c/n 27570

PACIFIC TYPE PASSENGER LOCOMOTIVE

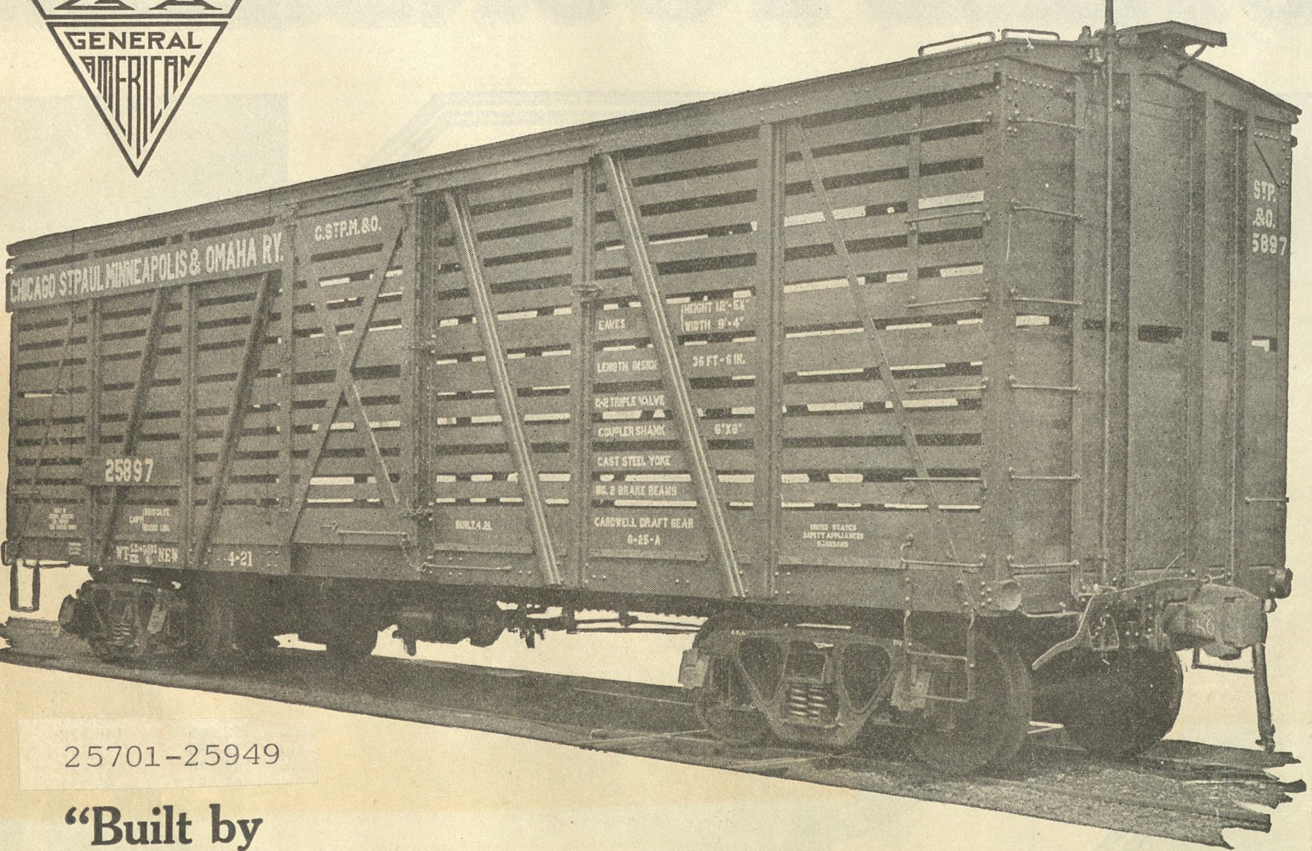
*Built for the Chicago, St. Paul, Minneapolis & Omaha Railway*



426-431

Richmond
c/n 62614
1921

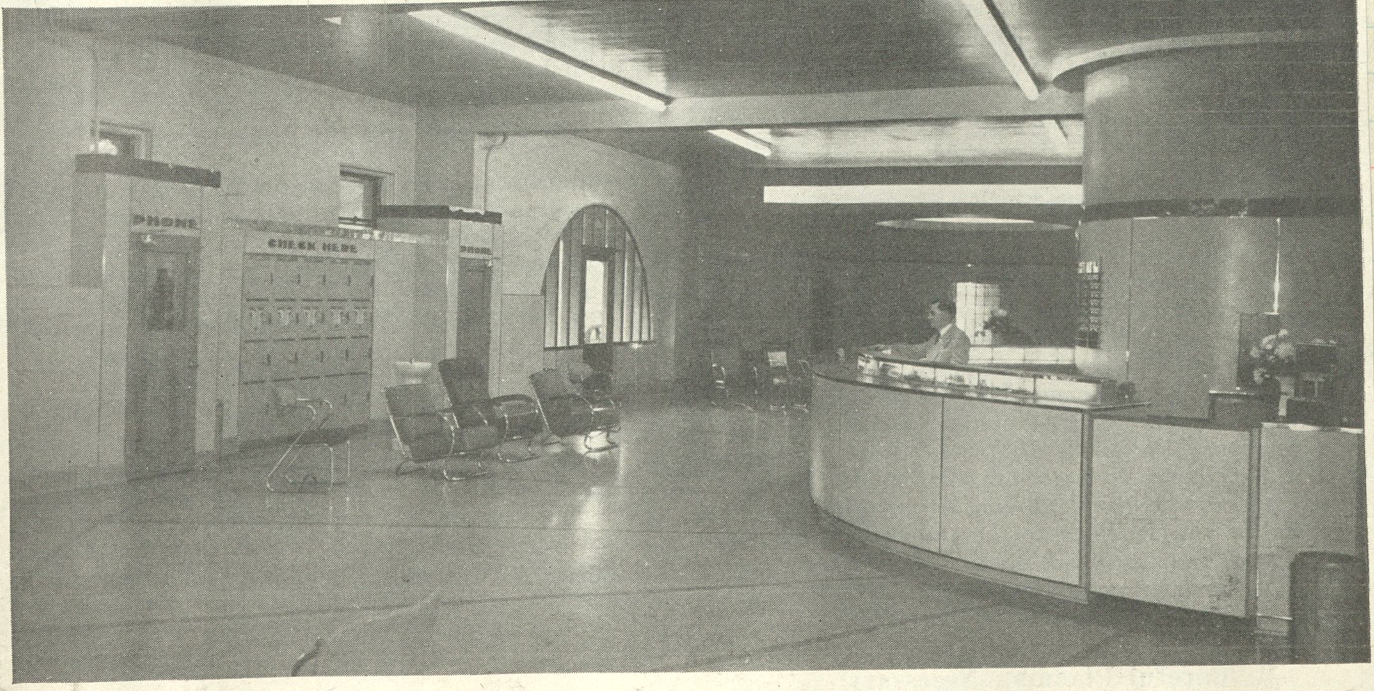
GA GENERAL AMERICAN


CHICAGO ST PAUL MINNEAPOLIS & OMAHA RY.
C.ST.P.M.&O.
25897

25701-25949

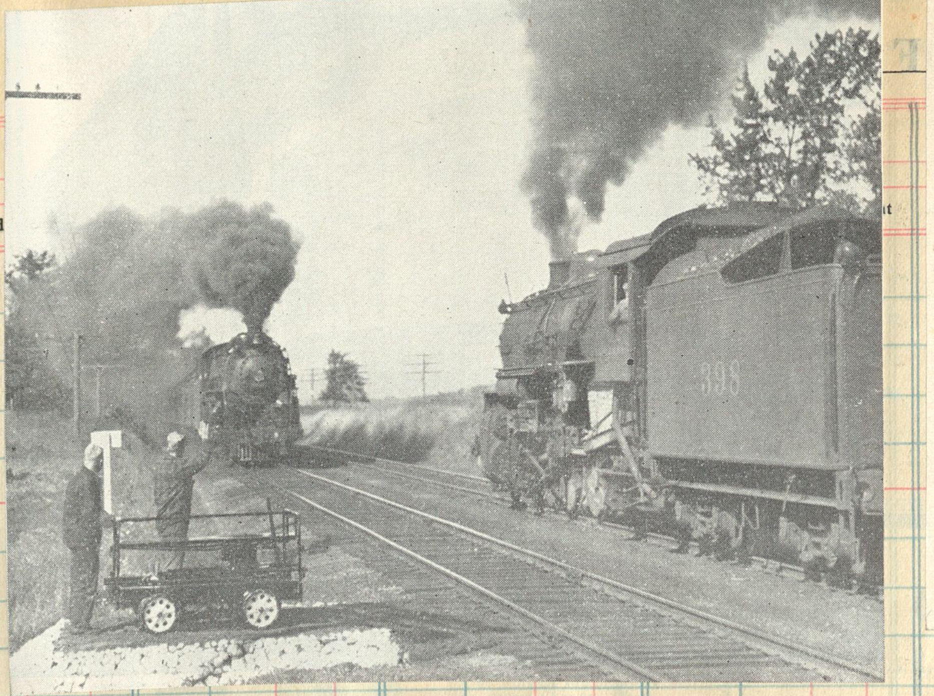
**"Built by
General American Car Co."** 1921

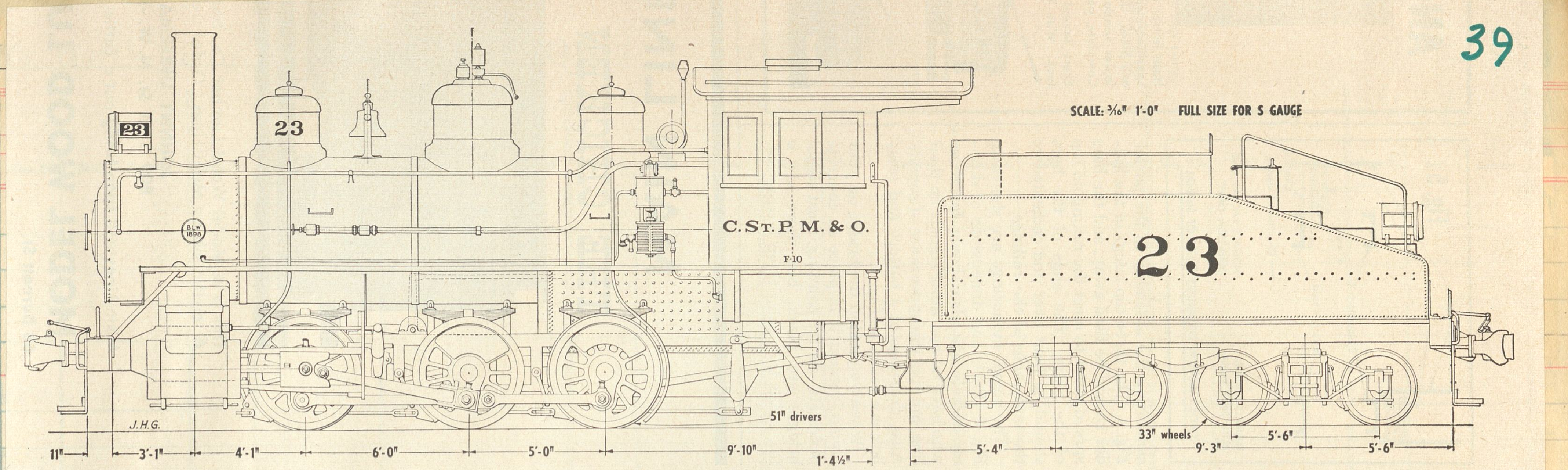
*Standard 40-Ton Stock Car*

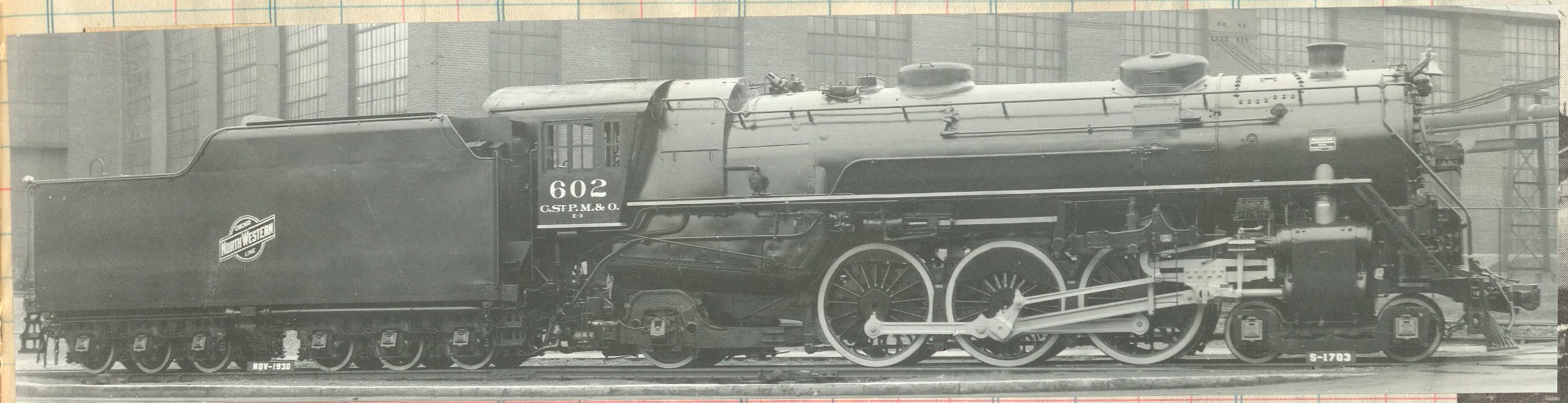

PHONE
CHECK ROOM

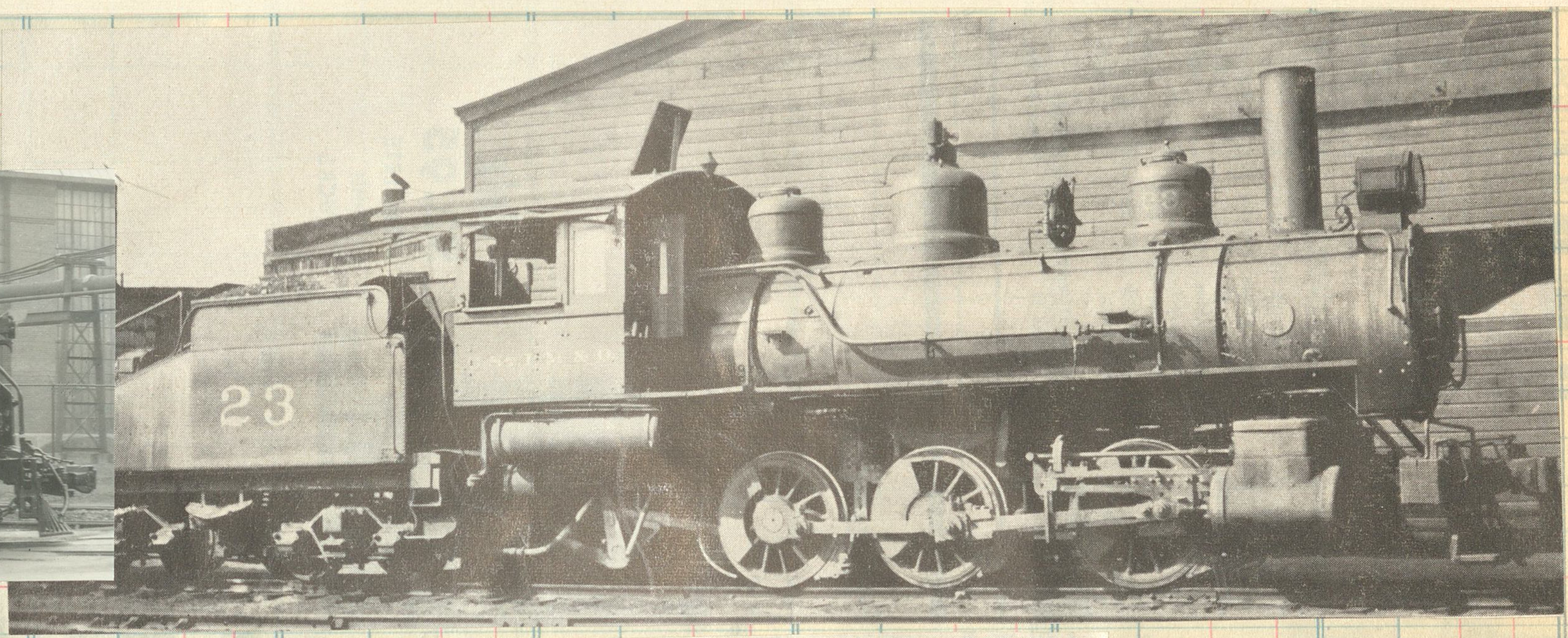
*The Modernized Waiting Room of C. St. P. M. & O. Passenger Station at Eau Claire, Wis.*

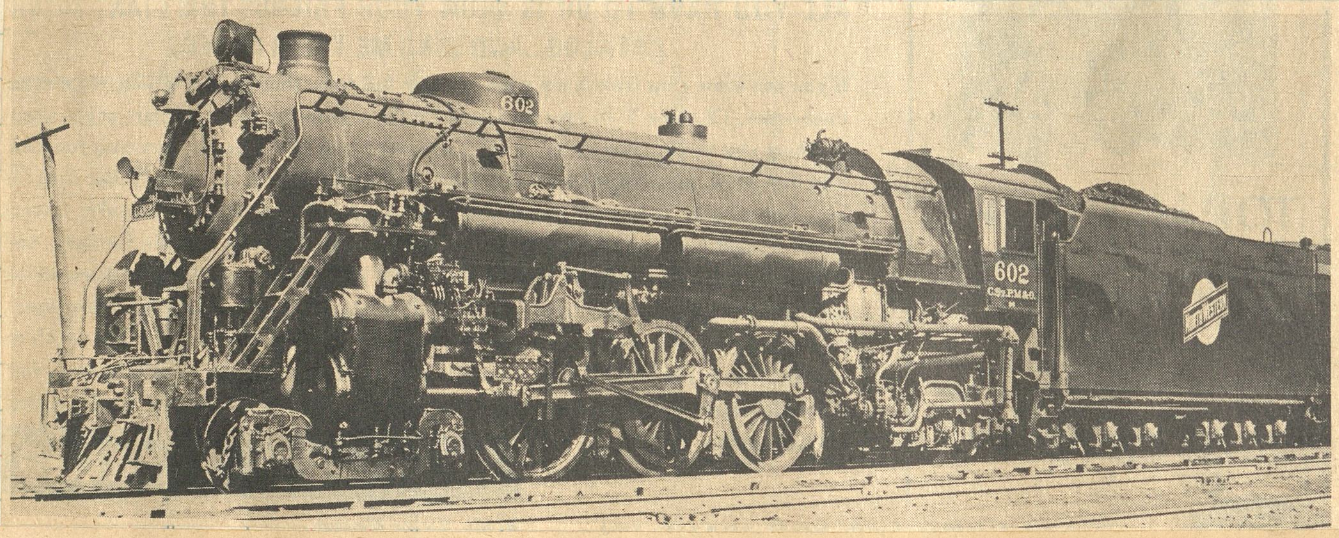
1942



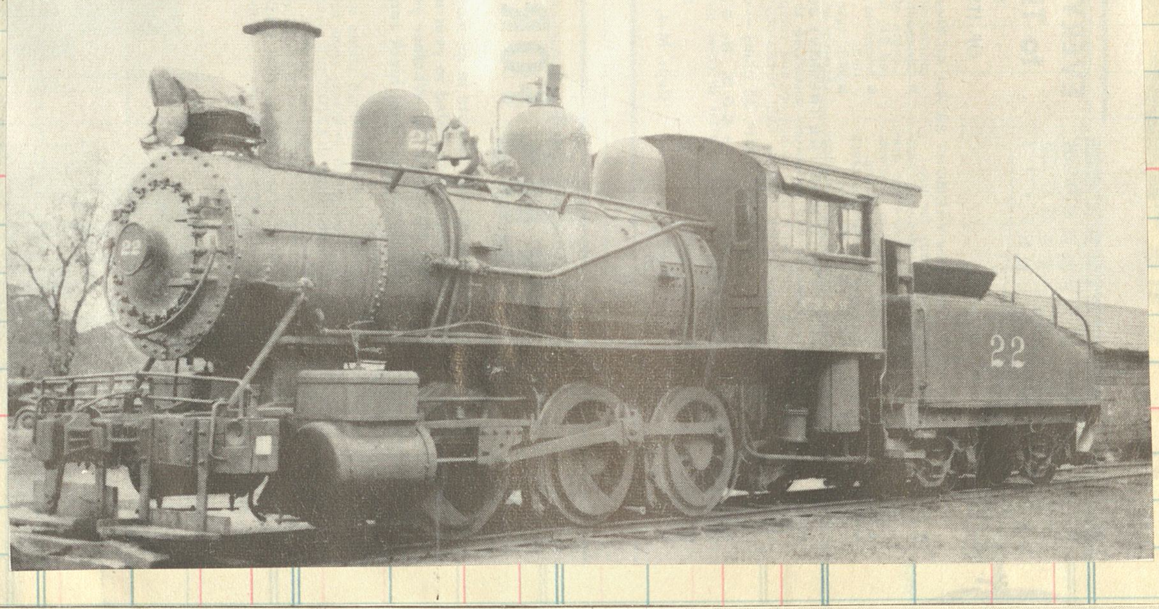

SCALE: 3/16" 1'-0" FULL SIZE FOR S GAUGE
23
C.St.P.M.&O.
F-10
J.H.G.
51" drivers
33" wheels
11"
3'-1"
4'-1"
6'-0"
5'-0"
9'-10"
1'-4½"
5'-4"
9'-3"
5'-6"
5'-6"



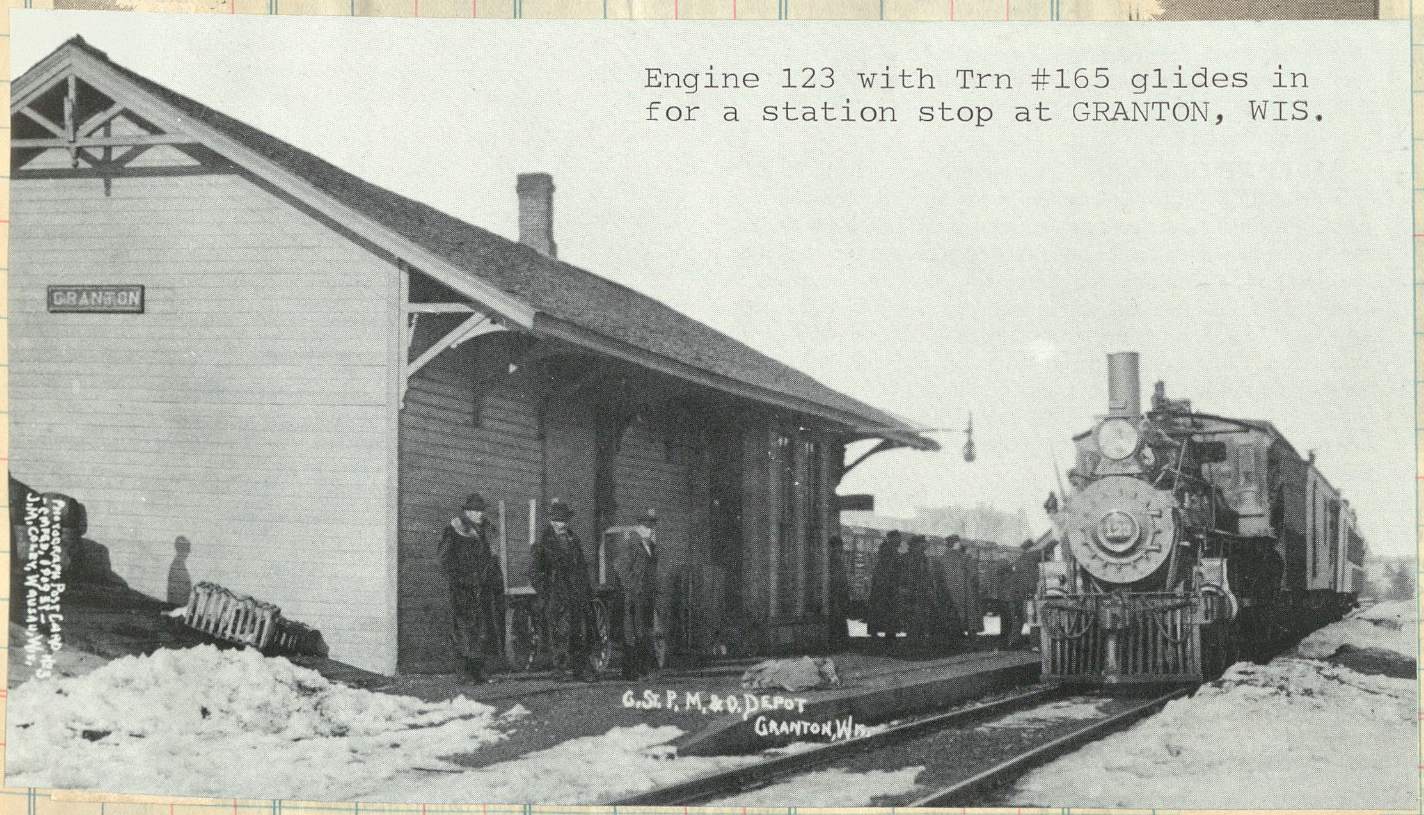


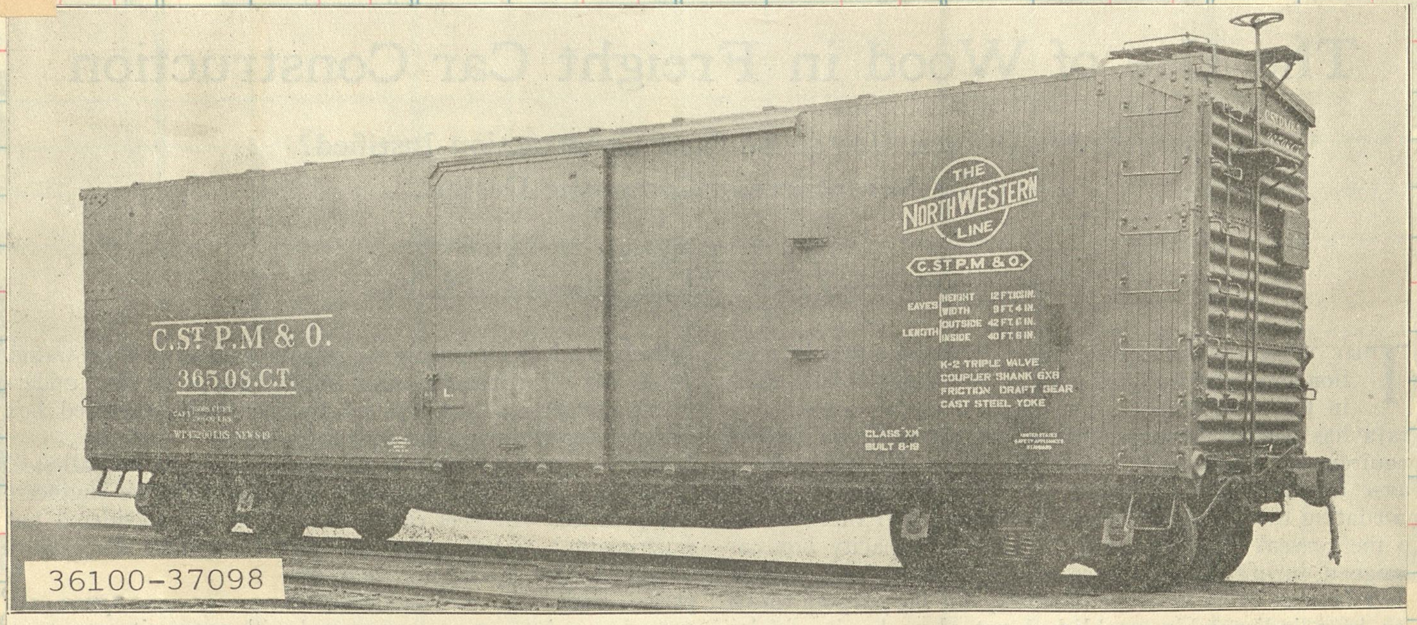


Weighing in at 449,300 lbs and a T F of 64,600# the three engines noed 600-602 were the heaviest and most powerful Pacifics ever constructed. Schenectady delivered them in 1930 under c/n's 68516-68518



Engine 123 with Trn #165 glides in for a station stop at GRANTON, WIS.

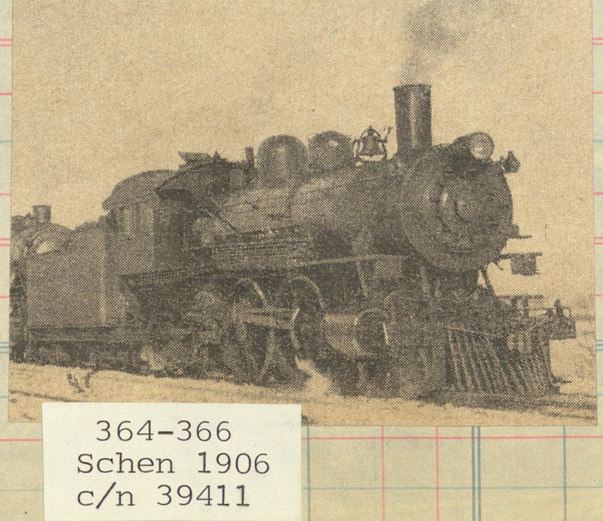

GRANTON
C.St.P.M.&O. DEPOT
GRANTON, WIS.


THE NORTH WESTERN LINE
C.St.P.M.&O.
C.St.P.M.&O.
36308.C.T.

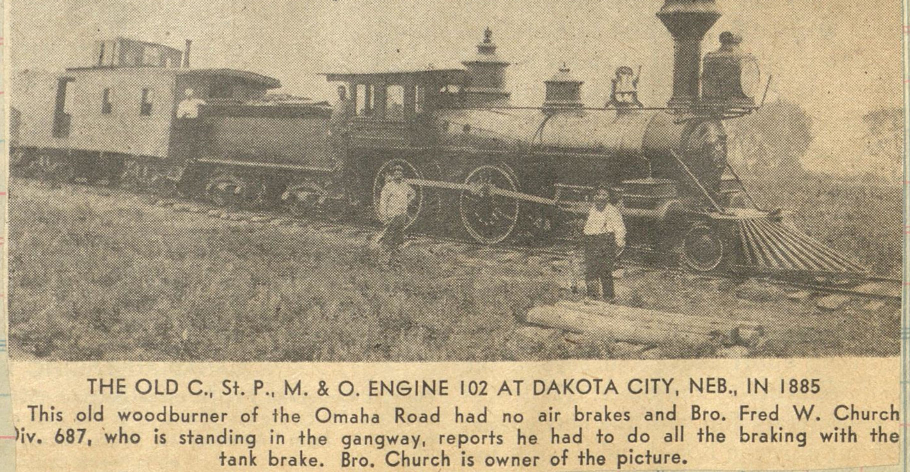
36100-37098

Railroad Administration Double-Sheathed 40-Ton Box Car 1919

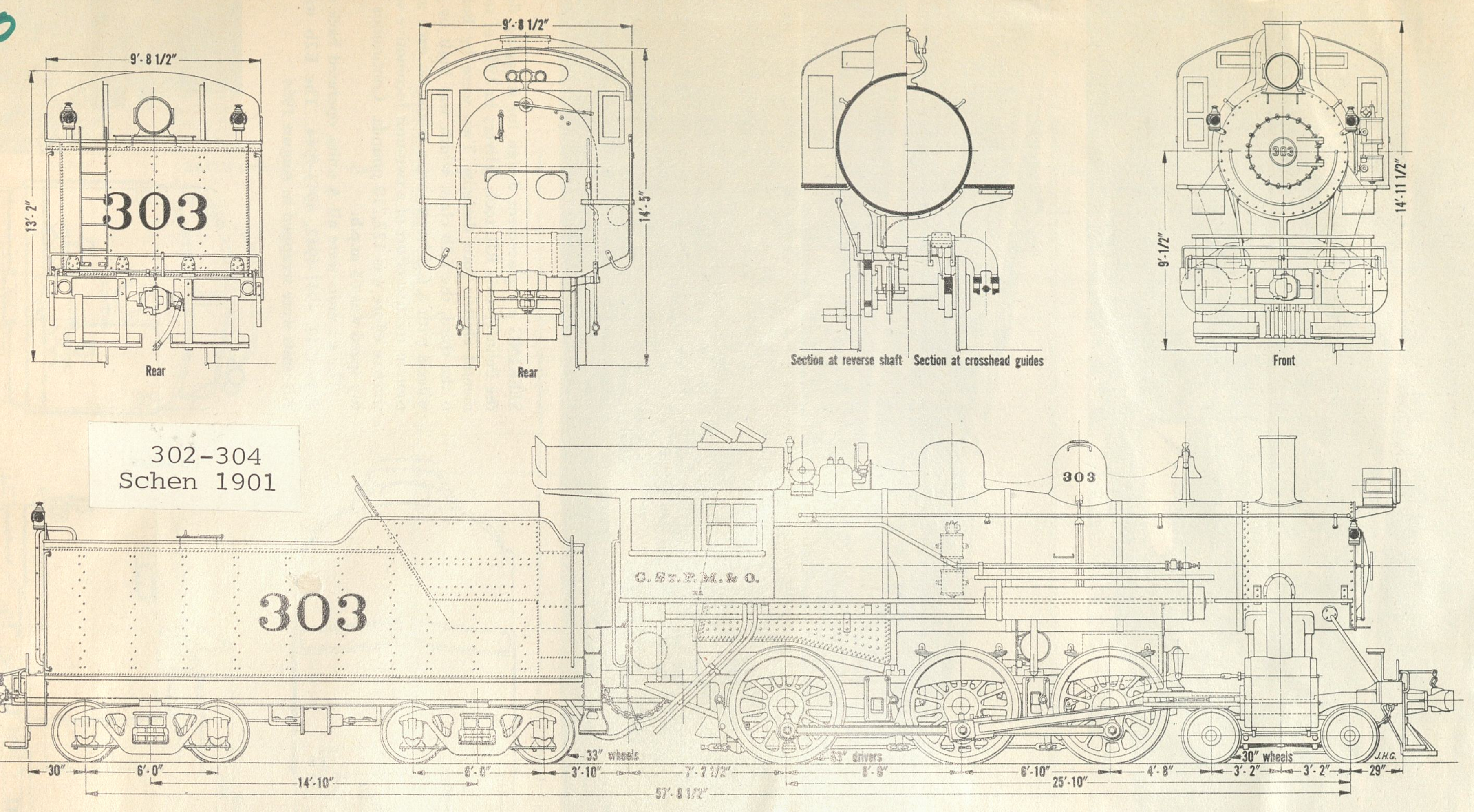
Trn #62 departing Minneapolis



364-366
Schen 1906
c/n 39411



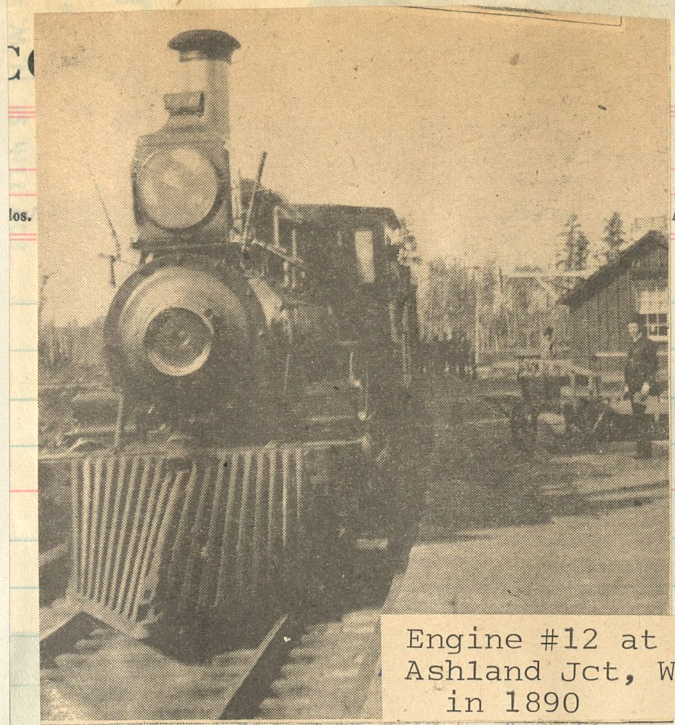
THE OLD C., St. P., M. & O. ENGINE 102 AT DAKOTA CITY, NEB., IN 1885
This old woodburner of the Omaha Road had no air brakes and Bro. Fred W. Church Div. 687, who is standing in the gangway, reports he had to do all the braking with the tank brake. Bro. Church is owner of the picture.


9'-8 1/2"
303
13'-2"
Rear
9'-8 1/2"
14'-5"
Rear
Section at reverse shaft
Section at crosshead guides
9'-1/2"
14'-11 1/2"
Front
303
C.St.P.M.&O.
303
33" wheels
63" drivers
30" wheels
J.N.G.
30"
6'-0"
14'-10"
6'-0"
3'-10"
7'-2 1/2"
8'-0"
6'-10"
25'-10"
4'-8"
3'-2"
3'-2"
29"
57'-8 1/2"

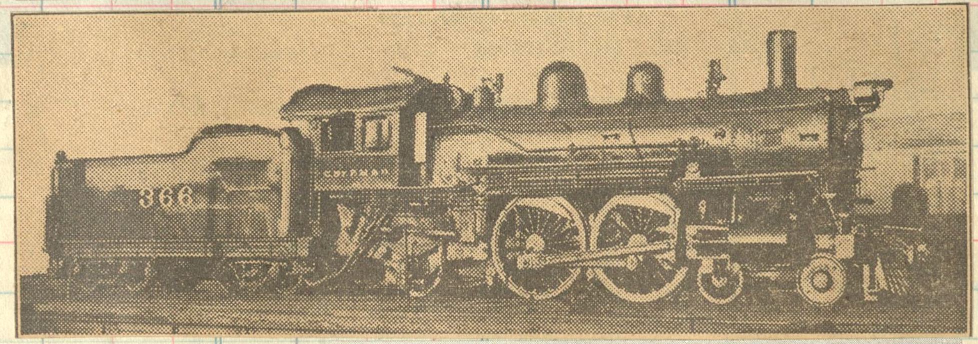
302-304
Schen 1901

AT

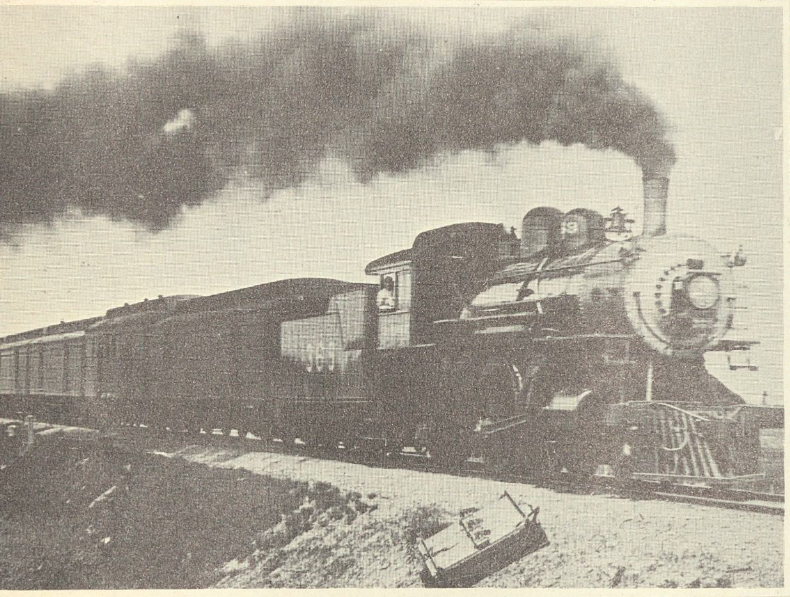
os. Amount Clos. No. Sold Amount Clos. No. Sold Amount



Engine #12 at
Ashland Jct, Wis
in 1890

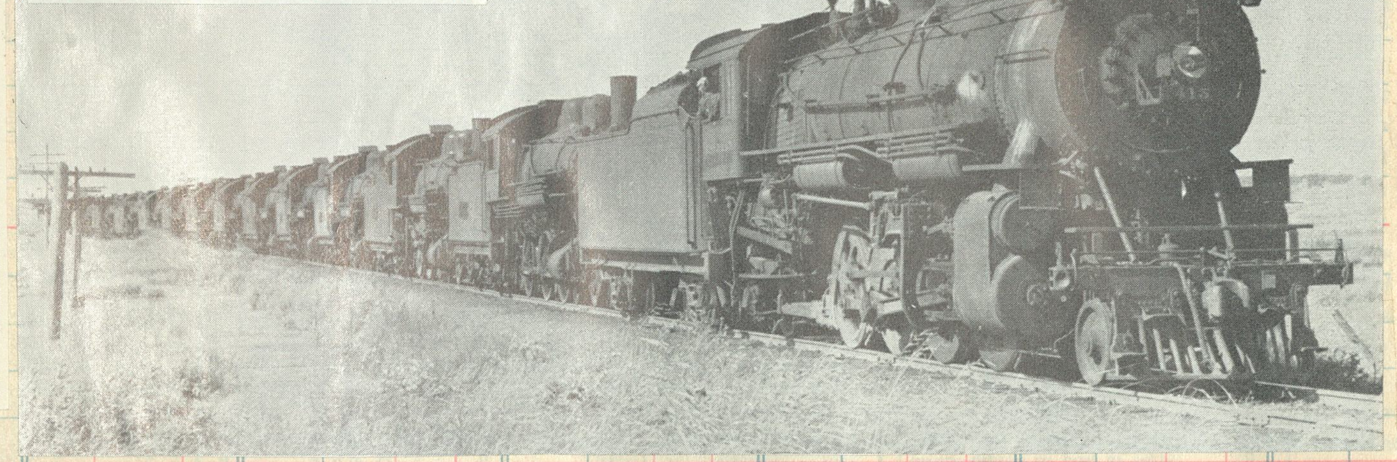


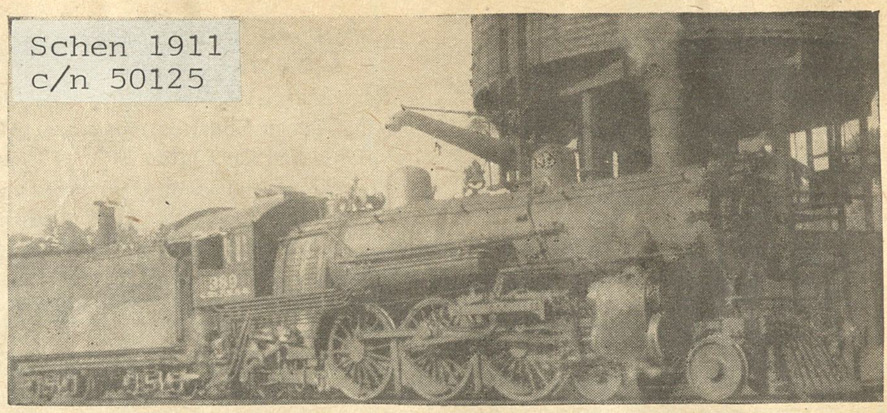
364-366 c/n 39412 Schen 1906



Another classic Schenectady Atlantic,
Nos 367-370 blt in Dec 1905.

A disc-drivered Chicago, St. Paul, Minneapolis & Omaha (C&NW) Mikado, No. 415, rolls north through New Richmond, Wis., with 15 Omaha Road old-timers. The little Ten-Wheelers and 2-8-0's have run out their days in revenue service and are now making their final run down the line, headed for the scrap yard at Duluth.

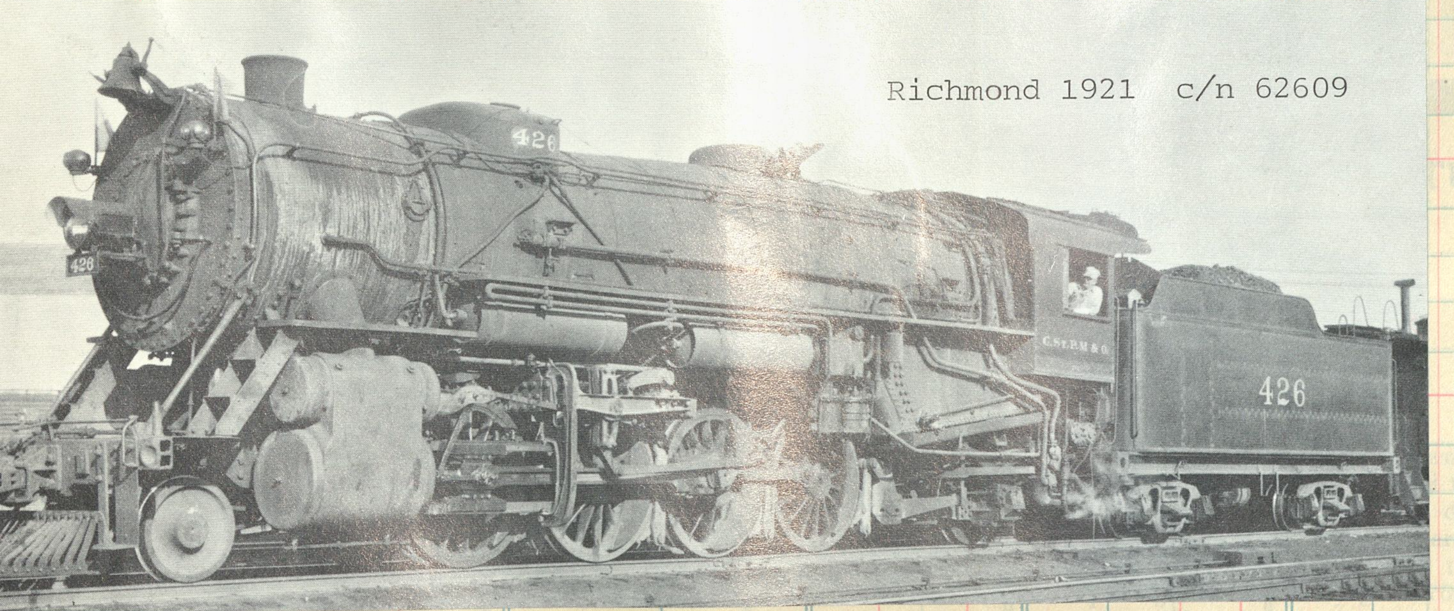




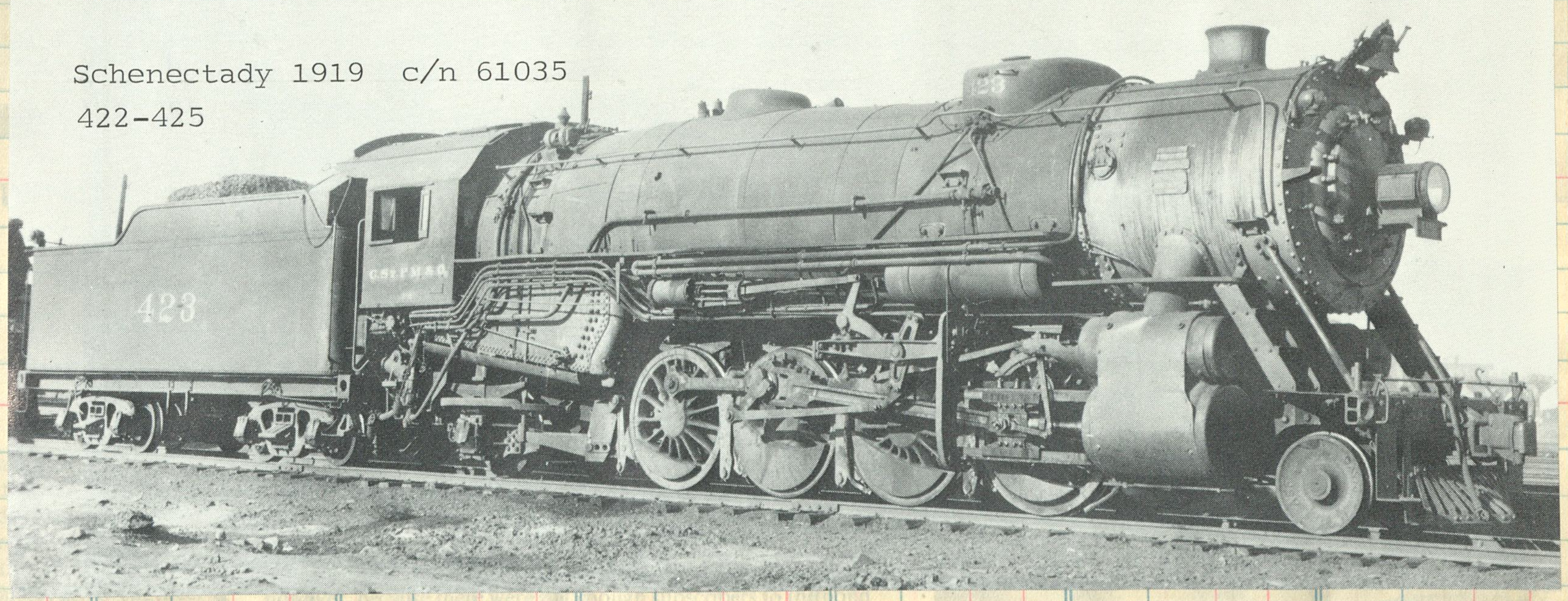
Schen 1911
c/n 50125

S. S. Sutton

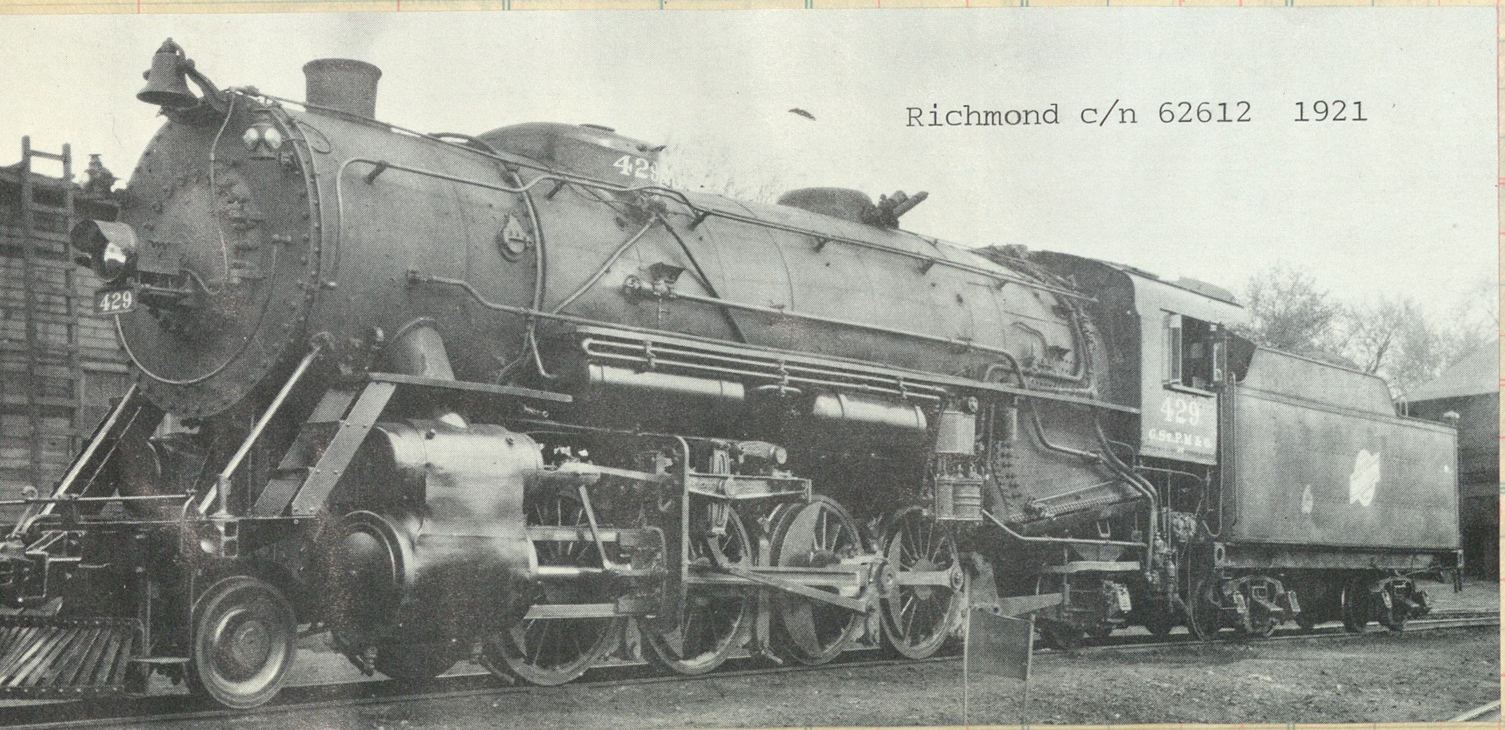
CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILROAD'S ENGINE 389 AT SIOUX CITY, IOWA



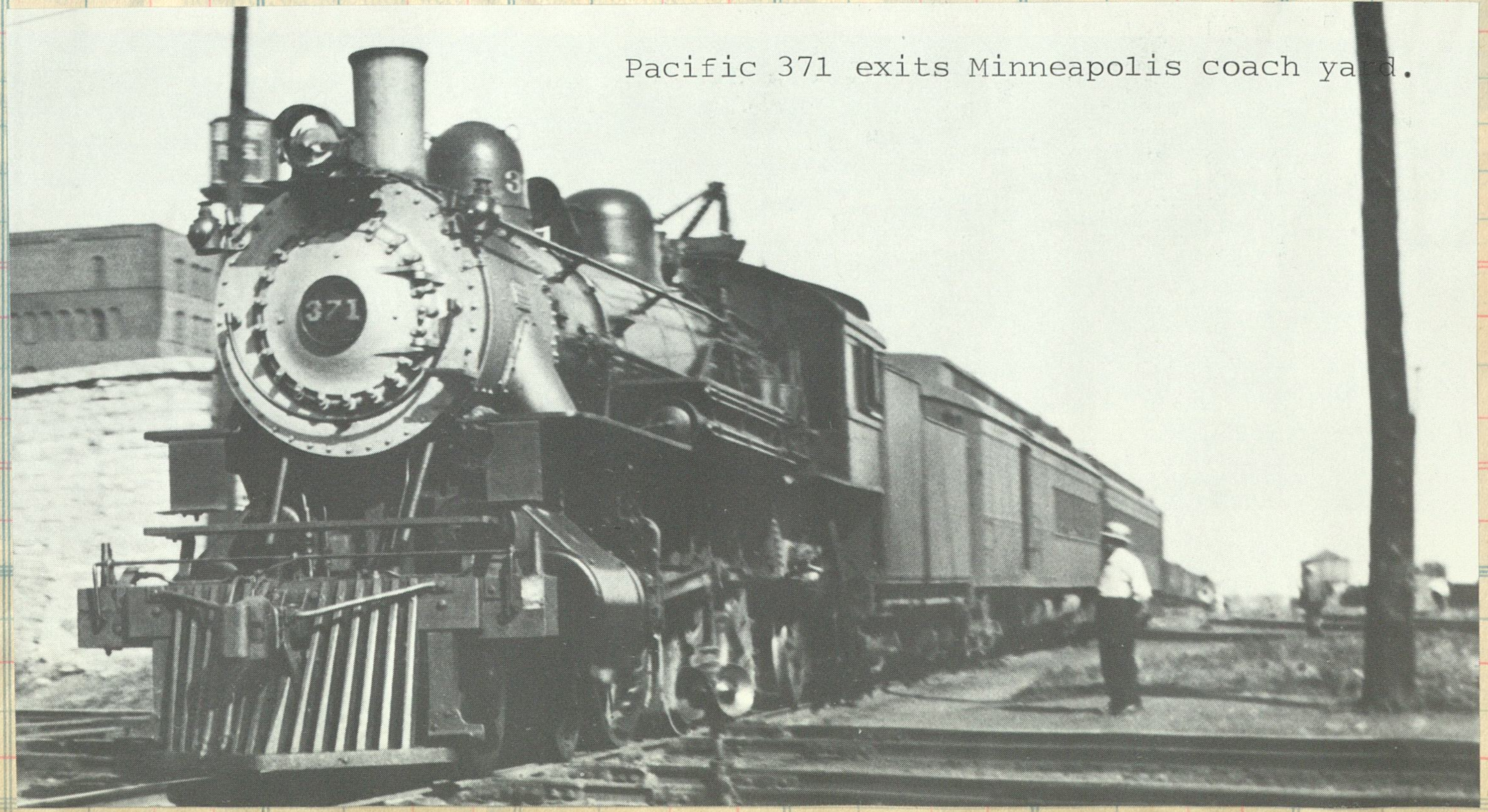
Richmond 1921 c/n 62609



Schenectady 1919 c/n 61035
422-425



Richmond c/n 62612 1921



Pacific 371 exits Minneapolis coach yard.

# THE MILWAUKEE ROAD

*The friendly Railroad of the friendly West*

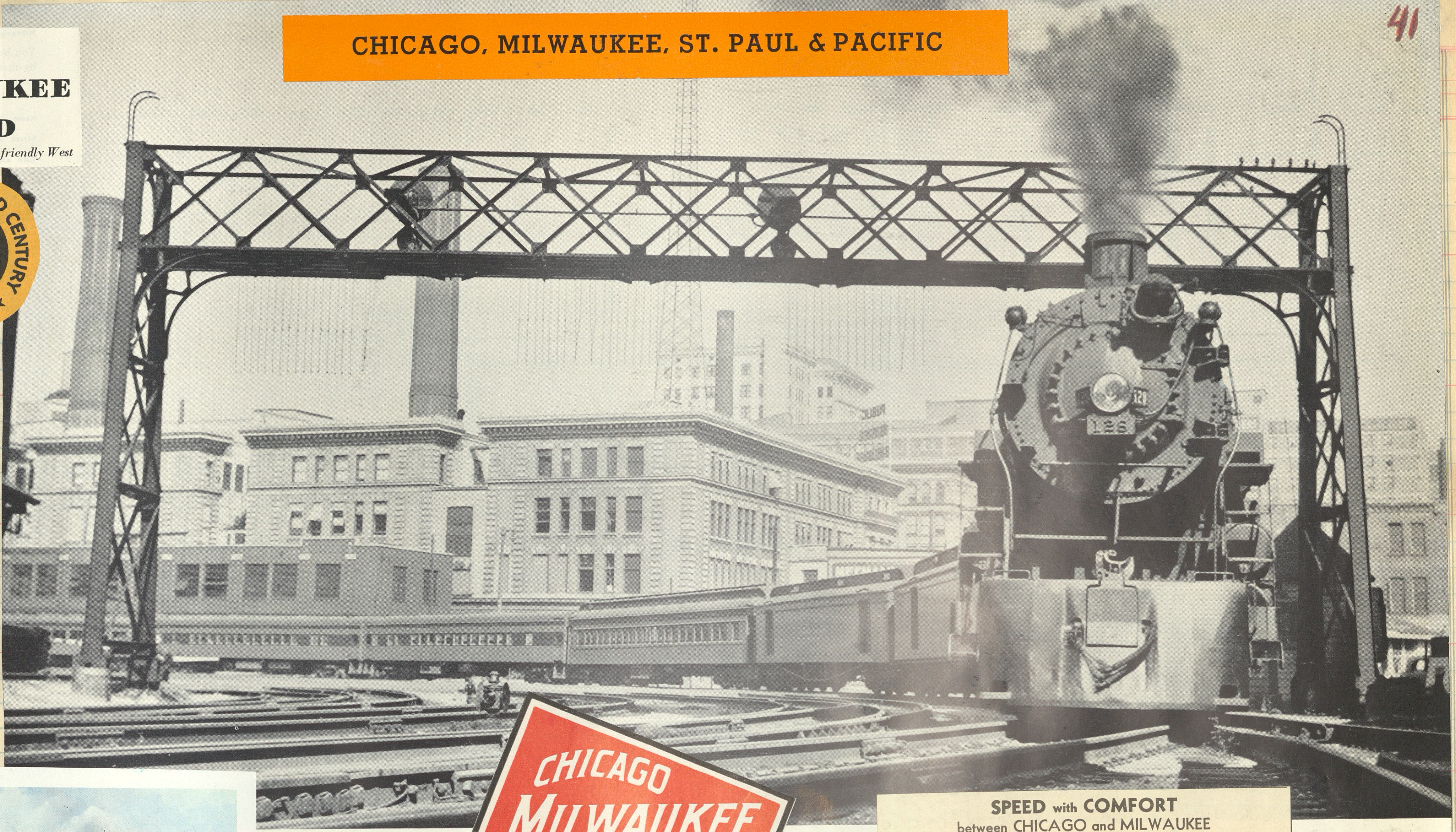
OPENING OUR SECOND CENTURY
1950

For
**SPEED**
*with*
**COMFORT**
*ride*
**The**
**MILWAUKEE**
**ROAD**

*The natural*
*high speed*
*route between*
**CHICAGO**
*and*
**MILWAUKEE**

*Fast non-stop*
*trains*

## CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC

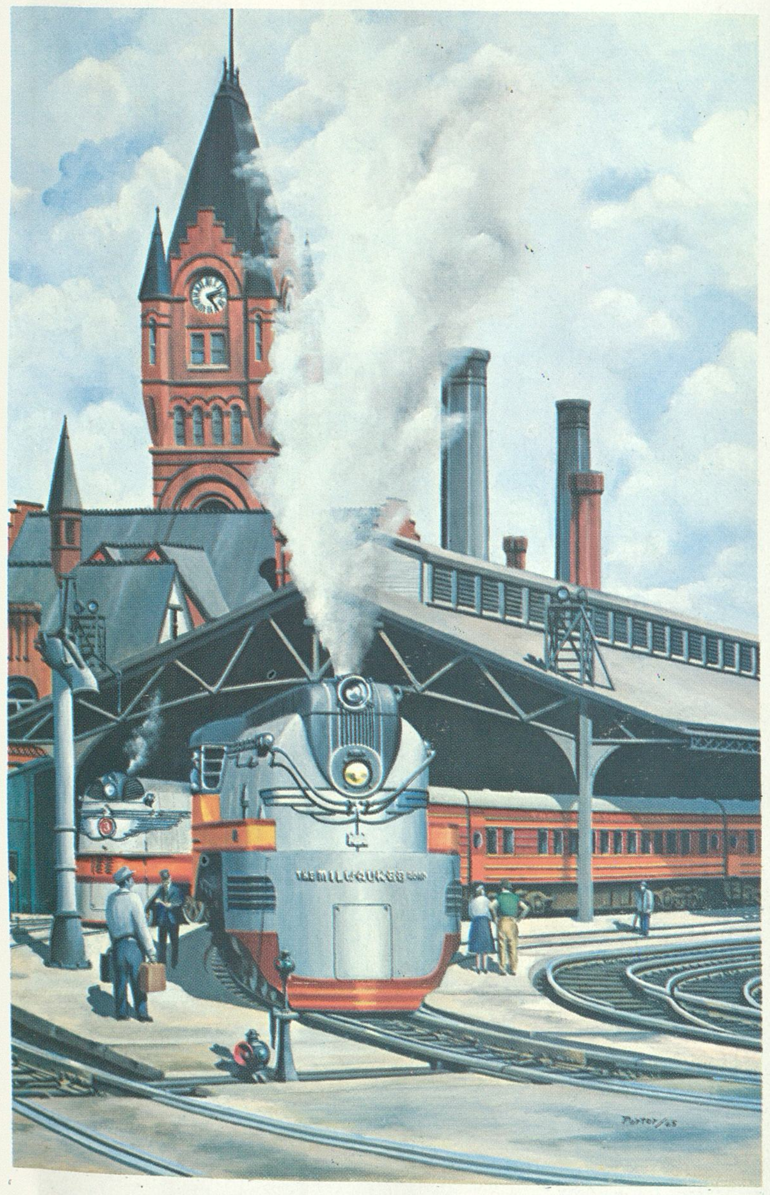


CHICAGO
MILWAUKEE
ST. PAUL
AND PACIFIC

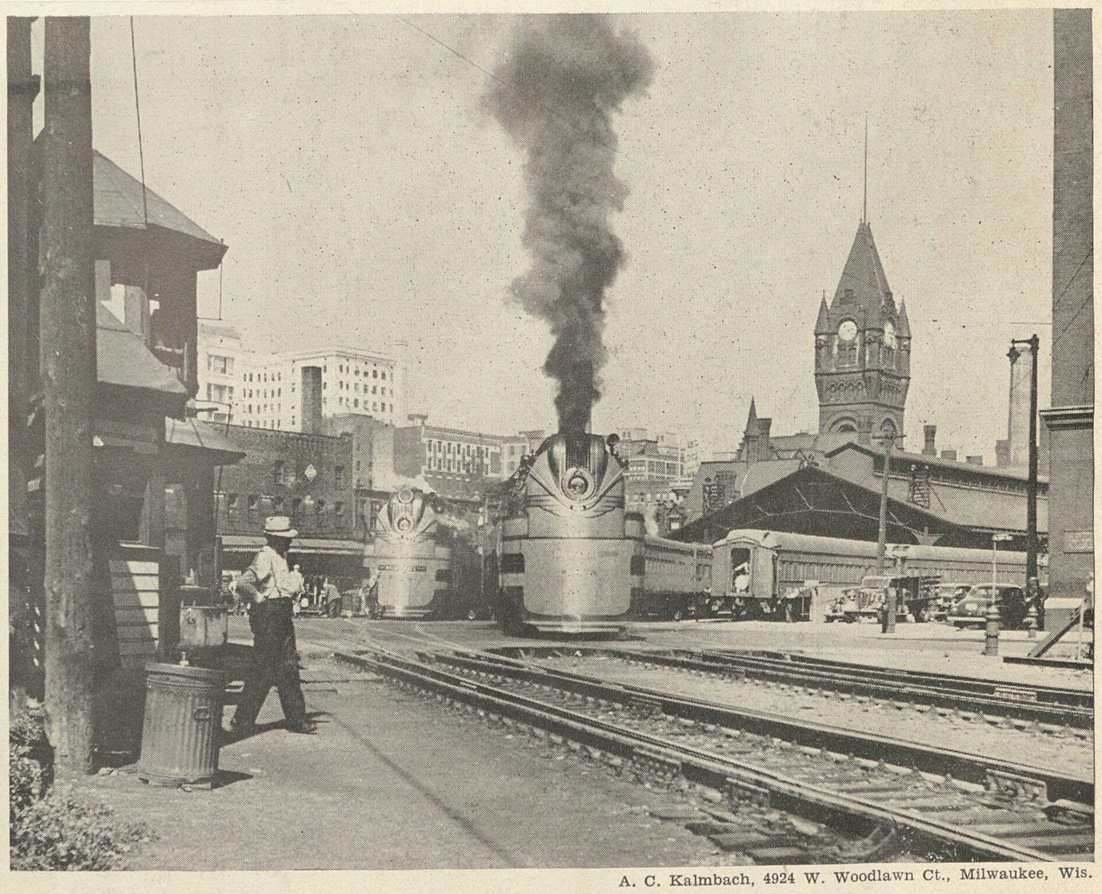
**SPEED with COMFORT**
between CHICAGO and MILWAUKEE

It's a smooth trip over the natural high speed route. Fast, non-stop schedules. All trains are air-cooled.

With the downtown Milwaukee skyline behind it, Milwaukee Road No. 28, a non-stop express to Chicago, leaves the station for its 75-minute 85-mile run. Numerous trains on faster than mile-a-minute schedules offer the country's fastest inter-city service between Chicago and Milwaukee. The locomotive in this photo is a Baldwin-built 4-6-4. By Henry J. McCord.



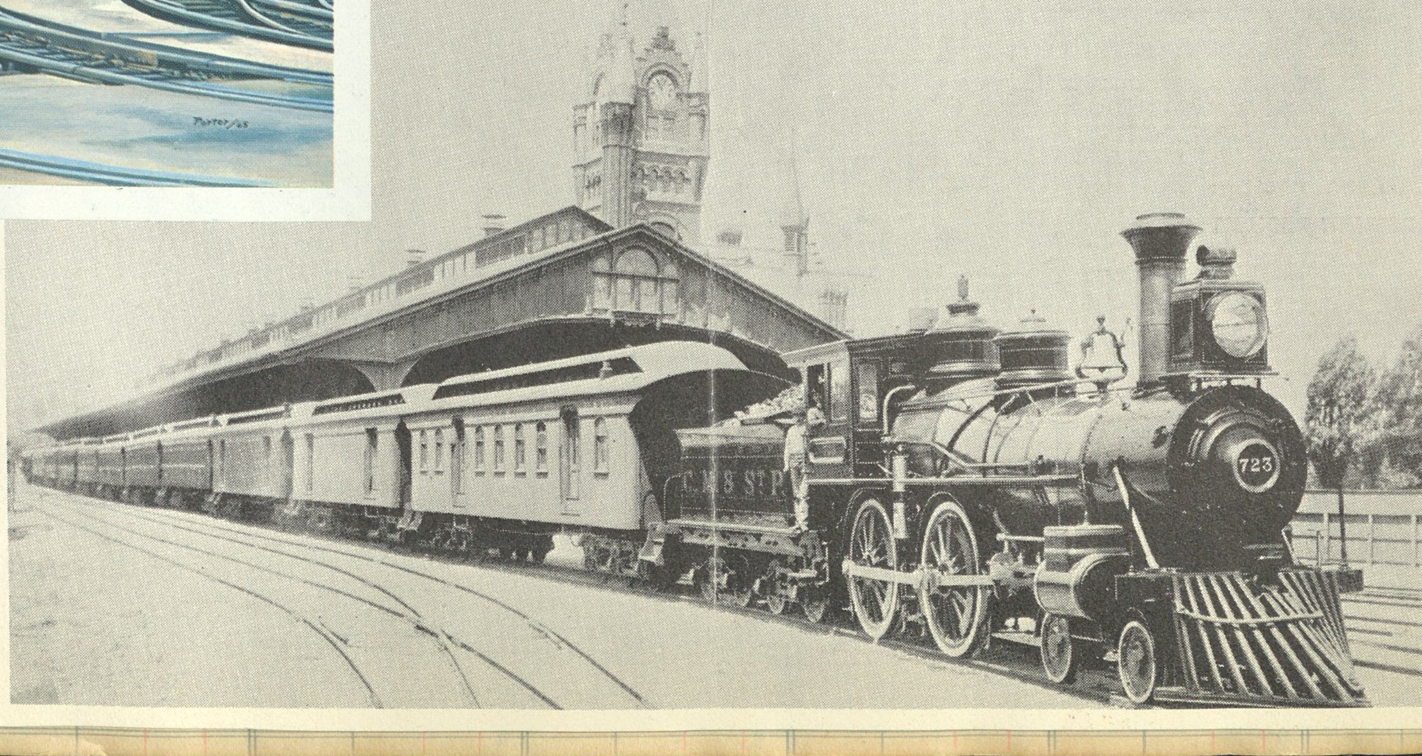
| Mls. | Table 22 | ★ 56 | ★ 2 | ★ 4 | ★ 16 | ★ 24 | ★ 12 | ★ 10 | ★ 28 | ★ 8 | ★ 46 | ★ 6 | ★ 100 | ★ 14 | ★ 58 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily | Daily |
|  | *Union Station* | AM | AM | AM | AM | AM | AM | AM | Noon | PM | PM | PM | PM | PM | PM |
| 0 | ‖**Milwaukee**....Lv | 4.45 | 5.10 | 6.40 | 7.05 | 7.40 | 8.30 | 10.00 | 12.00 | 1.30 | 4.00 | 5.05 | 6.15 | 8.15 | 9.10 |
| 2 | Stowell▲ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 7 | Lake | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | See Note ⑮ |  | ..... | ..... |
| 12 | Oakwood | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  | ..... | ..... |
| 16 | Caledonia | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | The Hiawatha<br>75 Minute Train<br>*Does not carry checked baggage* | ..... | ..... |
| 19 | Franksville | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 23 | **Sturtevant**....Lv | ⑲5.14 | ⑩5.38 | ..... | ..... | ..... | ⑫8.55 | ..... | ..... | ..... | ..... | f 5.35 |  | 8.40 | ..... |
| 27 | Somers | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | 85 Minute Train | ..... |
| 32 | Truesdell | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  | ..... |
| 33 | **Ranney, Wis.**▲ | ..... | ..... | ..... | ..... | 85 Minute Train | 90 Minute Train | 85 Minute Train | 80 Minute Train | 80 Minute Train | 90 Minute Train | ..... |  |  | ..... |
| 38 | Russell, Ill | ..... | ..... | ..... | ..... |  |  |  |  |  |  | ..... |  |  | ..... |
| 42 | Wadsworth | ..... | ..... | ..... | ..... |  |  |  |  |  |  | ..... |  |  | ..... |
| 45 | Gurnee | ..... | ..... | ..... | ..... |  |  |  |  |  |  | ..... |  |  | ..... |
| 48 | Wilson▲ | ..... | ..... | ..... | ..... |  |  |  |  |  |  | ..... |  |  | ..... |
| 53 | **Rondout** | ..... | ..... | ..... | ..... |  |  |  |  |  |  | ..... |  |  | ..... |
| 57 | West Lake Forest | ..... | ..... | ..... | ..... |  |  |  |  |  |  | See Note ⑮ |  |  | ..... |
| 61 | Deerfield | ⑲5.50 | ⑩6.14 | ..... | ⑧8.10 |  |  |  |  |  |  |  |  | ⑲9.10 | ..... |
| 64 | Northbrook | ..... | ..... | ..... | ..... |  |  |  |  |  |  |  |  | ..... | ..... |
| 65 | Techny▲ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 68 | Glenview | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 69 | Golf | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 71 | Morton Grove | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 74 | Edgebrook▲ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 75 | Forest Glen | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  | ..... | ..... |
| 76 | **Mayfair**▲ | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 77 | Grayland | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 79 | Healy | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 82 | Western Ave | 6.20 | 6.43 | 8.19 | 8.43 | ..... | ..... | ..... | ..... | ..... | 5.19 | 6.33 | ..... | ..... | ⑰1044 |
| 85 | **Chicago**.......Ar | 6.30 | 6.55 | 8.30 | 8.55 | 9.05 | 10.00 | 11.25 | 1.20 | 2.50 | 5.30 | 6.45 | 7.30 | 9.40 | 10.55 |
|  | *Union Station* | AM | AM | AM | AM | AM | AM | AM | PM | PM | PM | PM | PM | PM | PM |



A. C. Kalmbach, 4924 W. Woodlawn Ct., Milwaukee, Wis.

### *Hiawatha* out of Milwaukee in two sections.

Snuggling right in the heart of downtown Milwaukee is the Milwaukee Road station, one of the most conveniently located American depots. Its nineteenth century tower looks down upon a small wooded square and across to the busiest stores and office buildings of the city. Across the street is the main interurban and bus terminal. But it's behind the station that railfans like to gather, especially on warm Summer afternoons, when two or more *Hiawathas*, a *Chippewa*, Madison express, and a protection engine returning to the roundhouse all pull out westbound within 15 minutes. Downtown buildings form a backdrop for all this activity. The eastbound train in this photo is an American Express Banner Tour special, and a thin spray of steam reveals the *Chippewa* hiding behind the first *Hiawatha* coach. A. C.

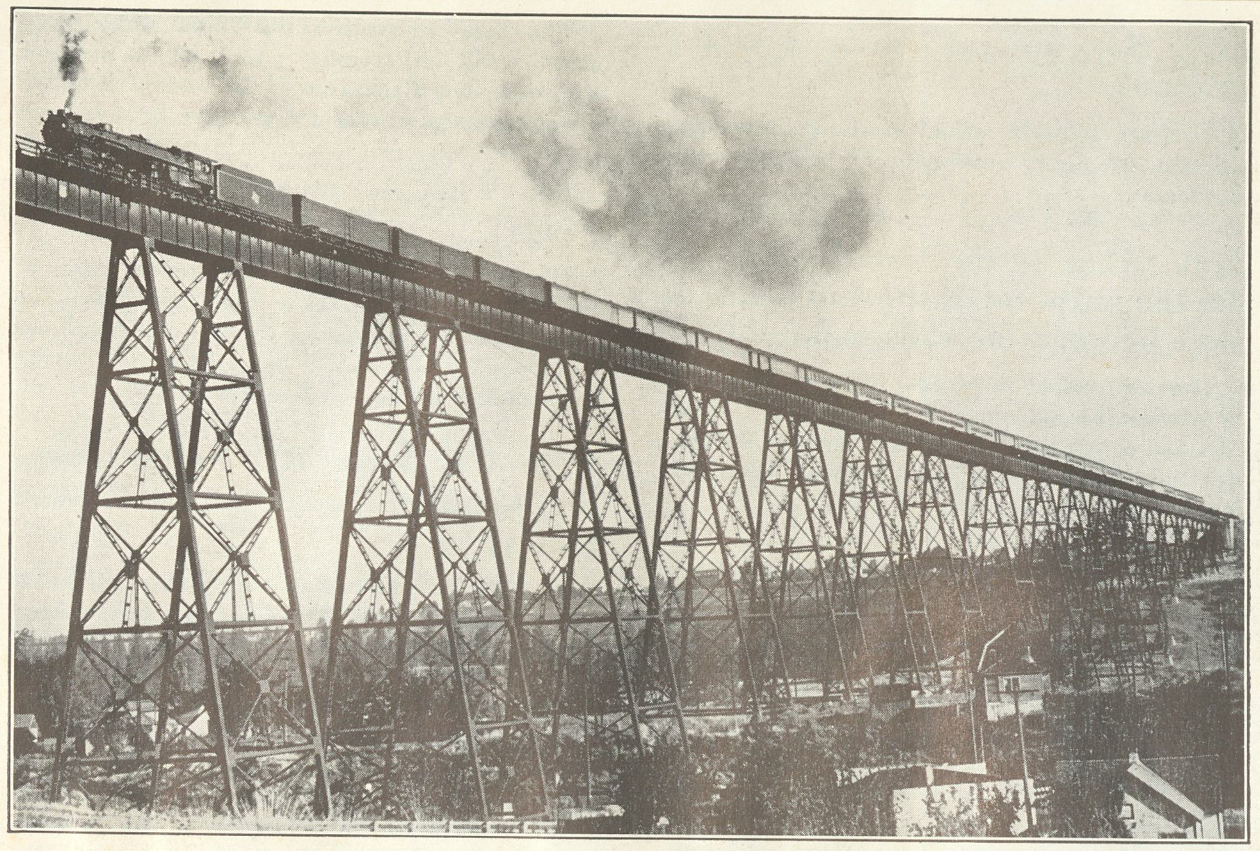


In 1927 was operating
11,220 miles with 63
electric and 1879 steam
engines, 68,268 freight
and 1,556 passenger cars.

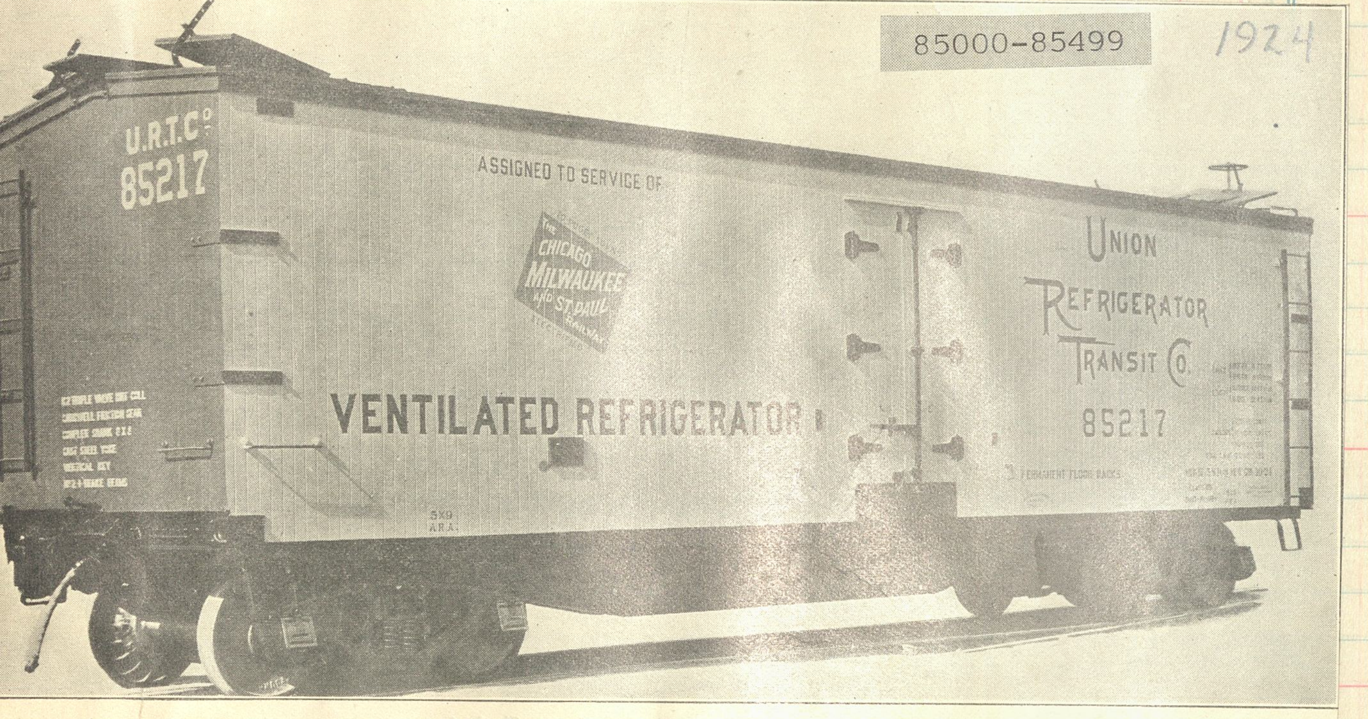
---

*Not until 1927 did the Chicago, Milwaukee & St. Paul advertise itself as "The Milwaukee Road."

2



he Longest Troop Trains on Record Was This 25-Car Special on the Milwaukee Road Which Recently Hauled About 700 Men of the 161st Washington and a Company from St. Maries, Idaho, Making a Non-Stop Run from Seattle to Othello, Wash. (Camp Murray), 121 Miles, with Engine 250, a 4-8-4 Type, Class S-1; Engineer Theodore May, Fireman Ed Kalimoski



85000-85499

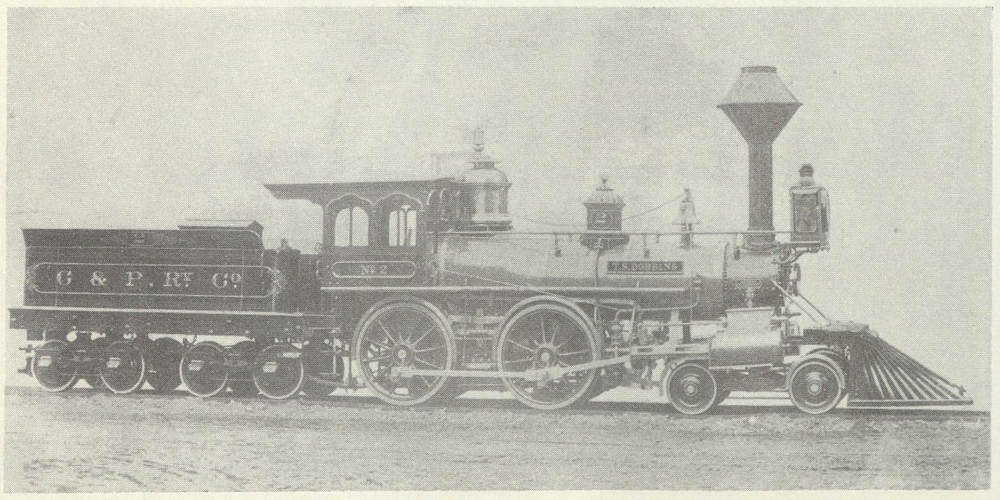
1924

U.R.T.Co
85217
ASSIGNED TO SERVICE OF
THE CHICAGO MILWAUKEE AND ST. PAUL
UNION REFRIGERATOR TRANSIT CO.
85217
VENTILATED REFRIGERATOR

40-Ton Capacity Steel Underframe Ventilated Refrigerator Car.

**CHICAGO & PACIFIC RAILWAY** started life as the Atlantic & Pacific Railroad, a line projected from Chicago to the Mississippi River and having no relationship with the later Atlantic & Pacific road that formed a part of the Santa Fe's route across the Southwest. Chartered on February 16, 1865, the Atlantic & Pacific Railroad was reorganized as the Chicago & Pacific Railway on April 30, 1872. By 1874 the road had 88 miles of track in operation between Chicago and Byron, Illinois. Financial problems brought about a foreclosure sale in 1879, the line being purchased by the Chicago, Milwaukee & St. Paul. Engine No. 2 of the Chicago & Pacific was built by Rogers, Shop No. 2191, in 1873. As the plate on her jacket indicates, she was named the T. S. DOBBINS, being named in honor of Thomas S. Dobbins of Chicago, president of the road. Note the fancy woodwork applied around her cab windows and panels and the exceptional length of her diamond stack. Poor's Railroad Manual of the United States lists 5 locomotives on the Chicago & Pacific roster at the close of 1876.

(Collection of Dr. S. R. Wood)



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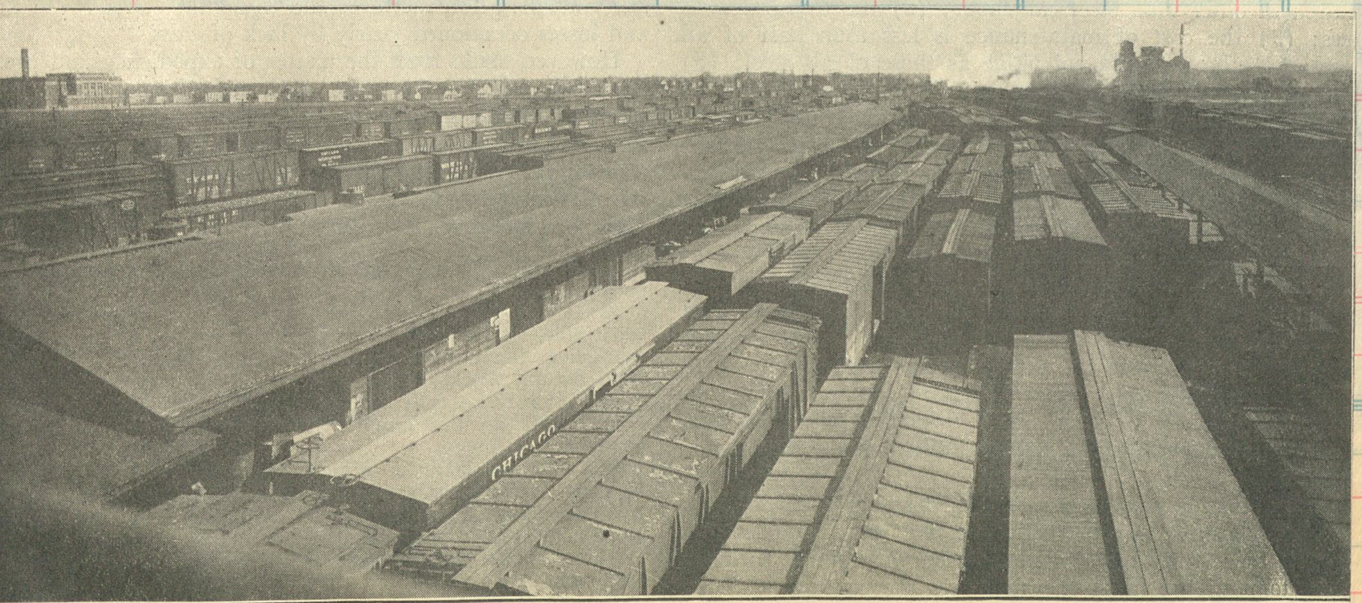
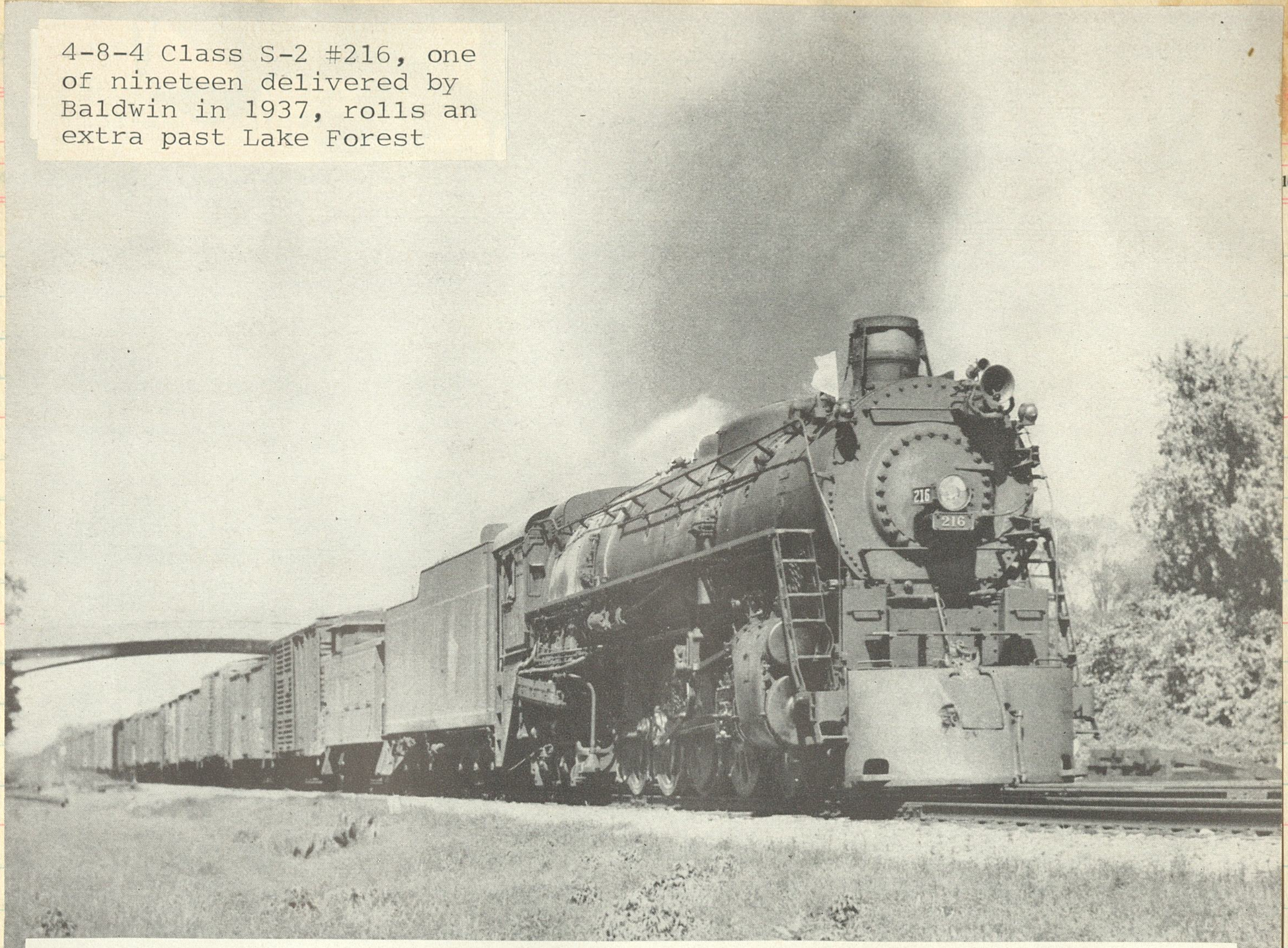
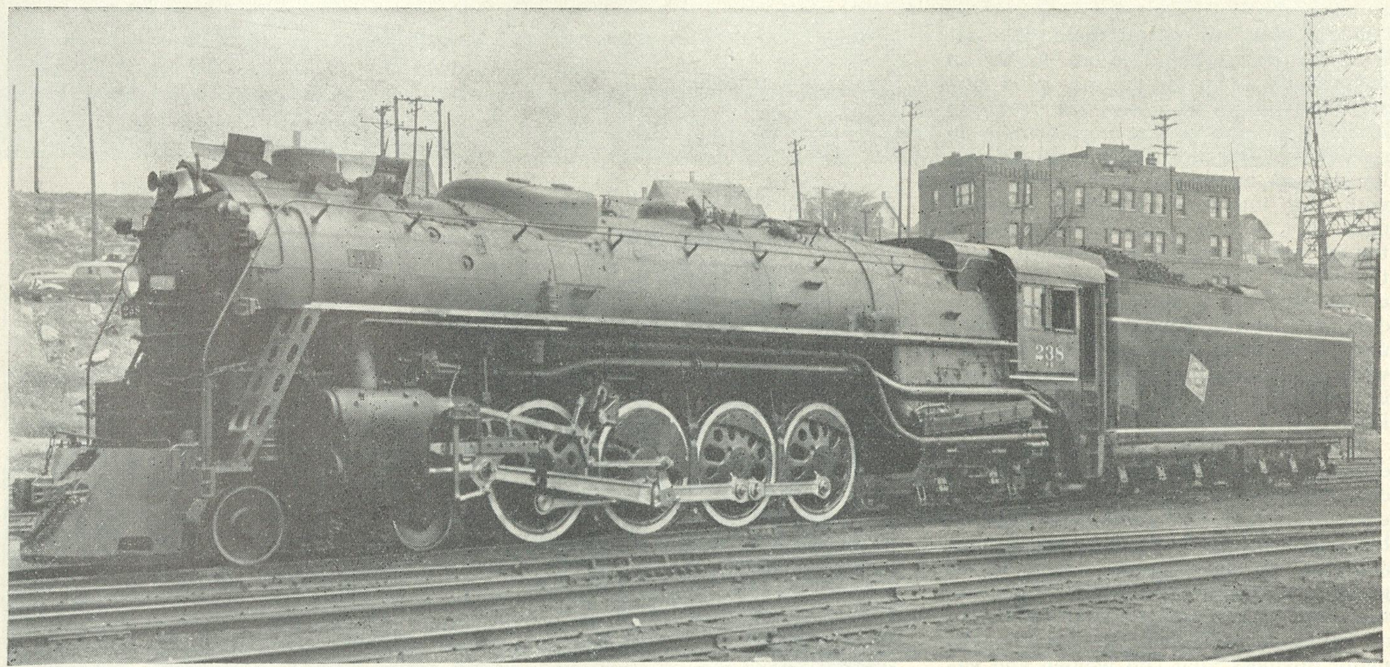


ood Yard, Chicago, Milwaukee & St. Paul 1921

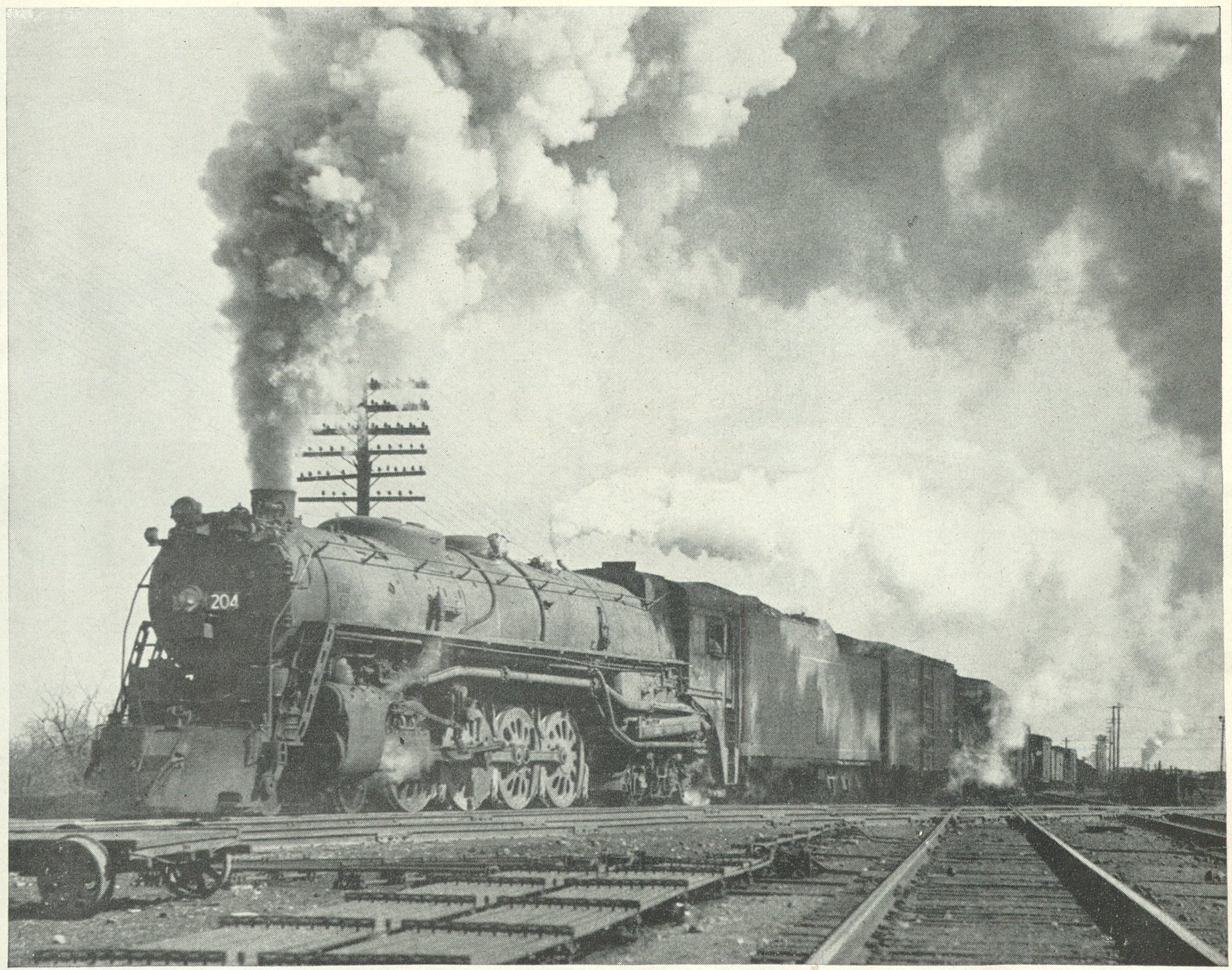


4-8-4 Class S-2 #216, one
of nineteen delivered by
Baldwin in 1937, rolls an
extra past Lake Forest



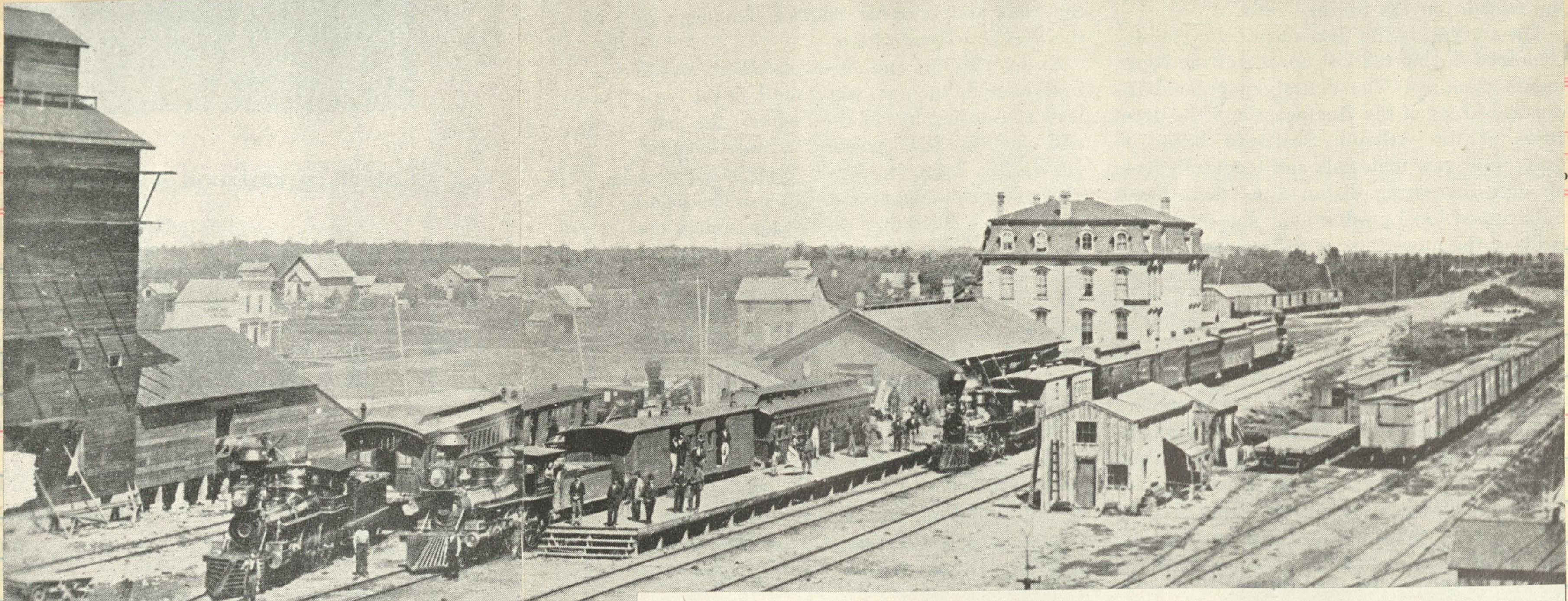
Harvey Uecker; courtesy Milwaukee Road.

The Milwaukee Road has 40 class S-2 Northern (4-8-4) locomotives, built by Baldwin in 1938 and 1940 and numbered from 201 to 240. No. 238 is shown in the shop yards at Milwaukee, with smoke elevator in the down position. These engines are used for freight and heavy passenger service.



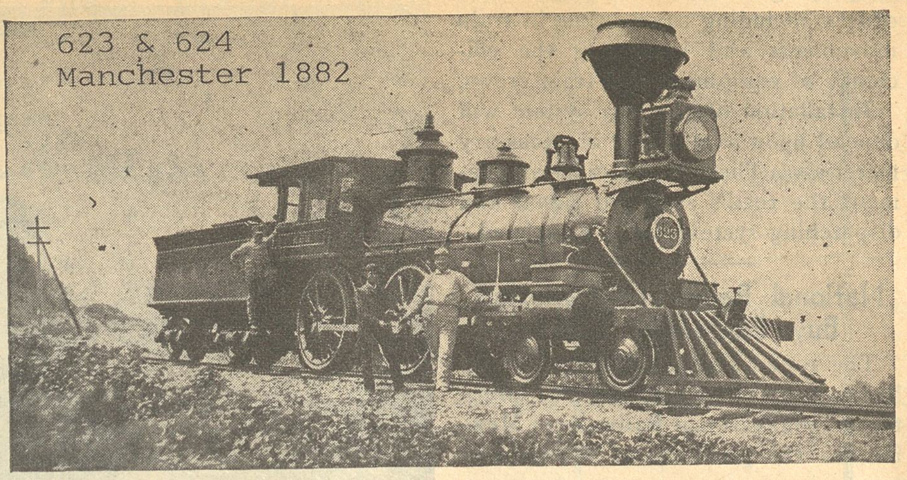
Henry J. McCord.

An impressive Milwaukee Road 4-8-4 carefully works her way out of Bensonville Yard, 20 miles from Chicago, with time freight No. 263 for Milwaukee.



### Early boomer days at Austin, Minn.: June, 1874.

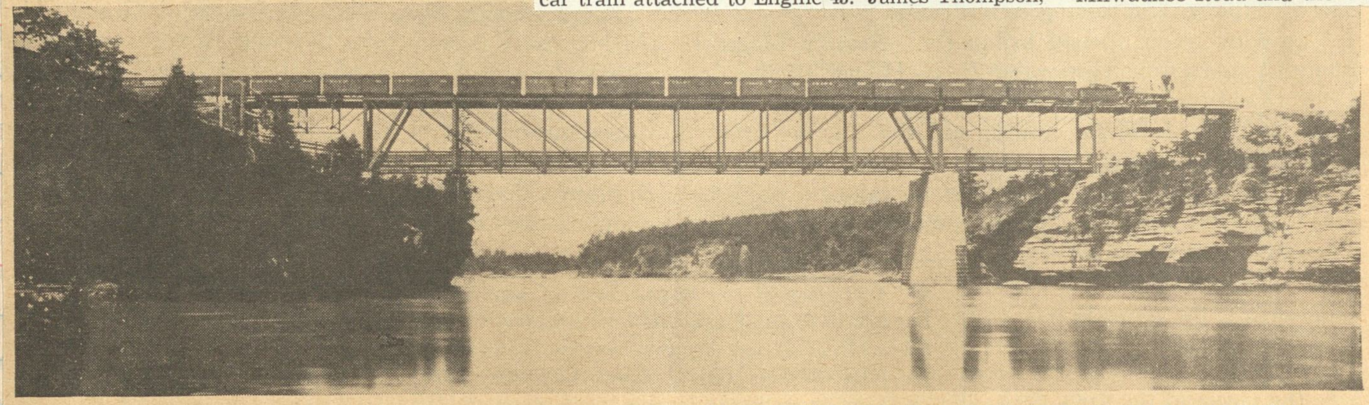
The photo below shows the station at Austin, Minn., in the days when railroads were young. On the main track in front of the station is Chicago, Milwaukee & St. Paul train No. 2, with Engine 9 at the head. On the rear end is Engine 120. Near the end of the platform is Burlington, Cedar Rapids & Northern engine No. 24. Next to No. 24 is No. 180, standing at the rear of a two-car train attached to Engine 43. James Thompson, who drove No. 43 when this photo was taken, died in April, 1887, two months after his last run on the Austin-Mason City line. He was an engineer for more than 36 years; over half of this period was spent on Ohio roads before he settled down to continuous running on the CM&StP in Minnesota and Iowa. Austin today has a population of more than 18,000 and is served by the Milwaukee Road and the Chicago Great Western.



623 & 624
Manchester 1882

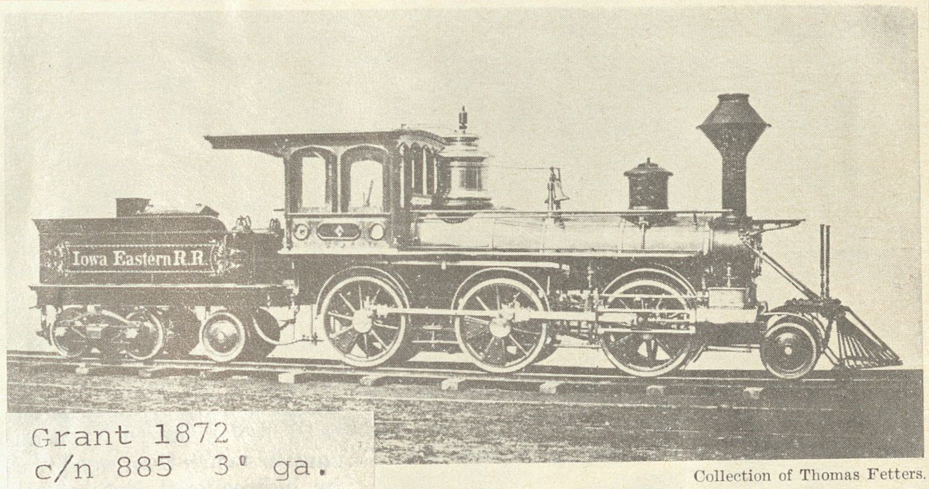
MILWAUKEE ROAD'S OLD ENGINE 623 IN 1886

The engine was in work train service at King's Cooley, Minn., on the River division of the Road, when this photo was taken. Left to right: the late Brother Sam Manhart; Brother W. W. Berry, then conductor and member of the O.R.C. and owner of this photo; and the late Brother Jim Dutch, was then engineer.



A MILWAUKEE WOOD-BURNER PULLING FREIGHT ACROSS THE OLD COMBINATION BRIDGE NEAR KILBOURN

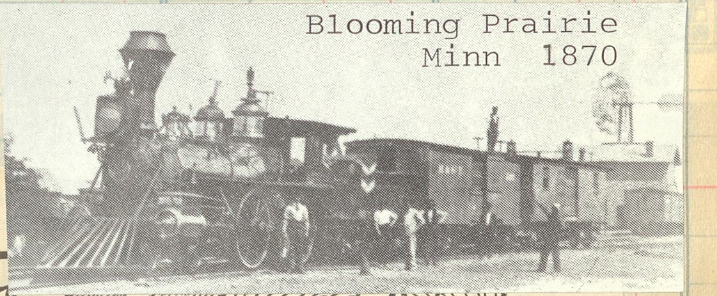
This picture was taken many years ago and this region is now widely known as the Dells of Wisconsin. Note that the bridge was a unique double-deck affair for both railroad and highway traffic.


Iowa Eastern R.R.

Grant 1872
c/n 885 3' ga.

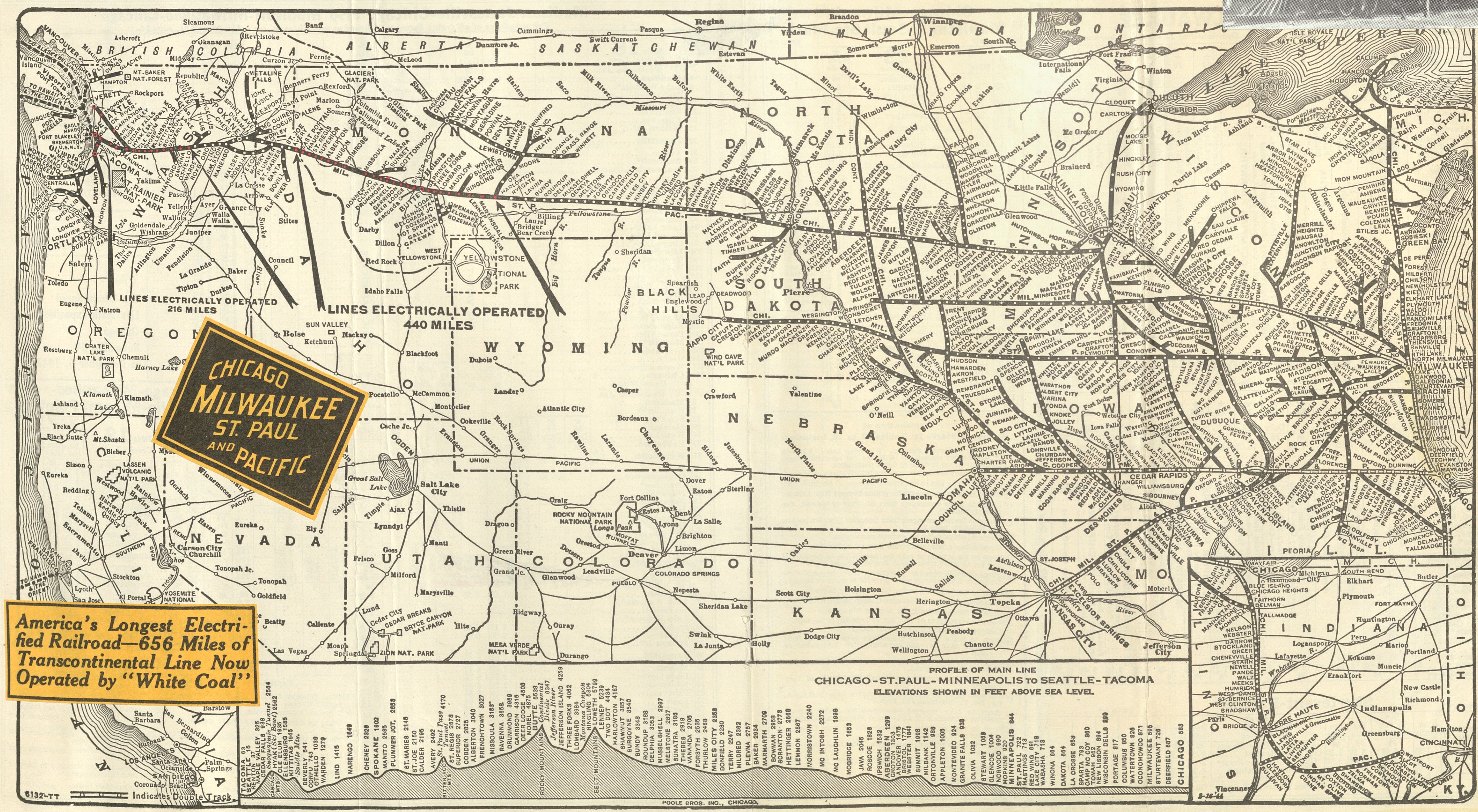
Collection of Thomas Fetters.

GRANT 2-6-0 served Iowa Eastern, which was later absorbed by the Milwaukee Road.



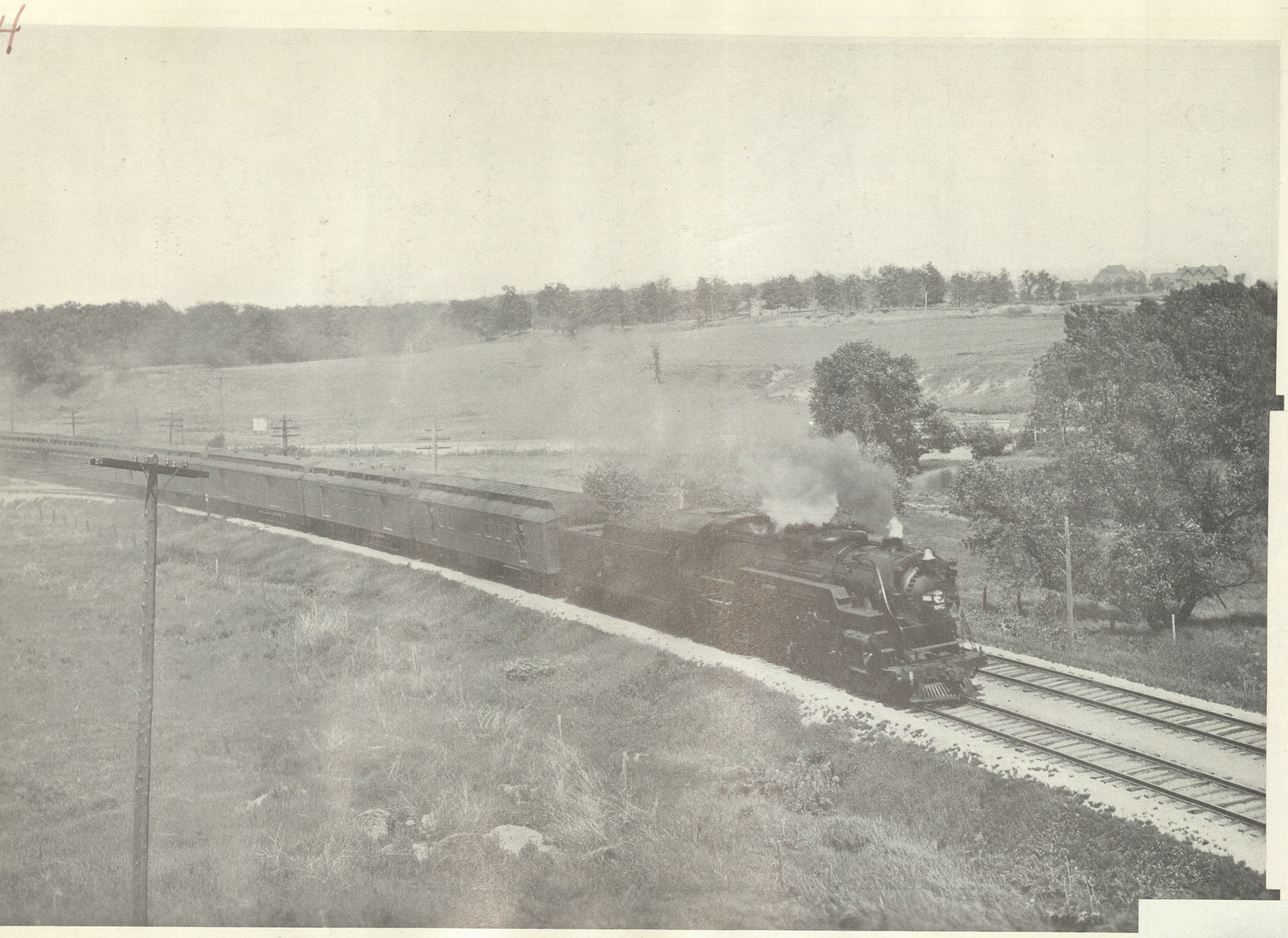
Blooming Prairie
Minn 1870

## The ONLY Road Operating Over Its Own Rails All the Way between Chicago and the Pacific Northwest

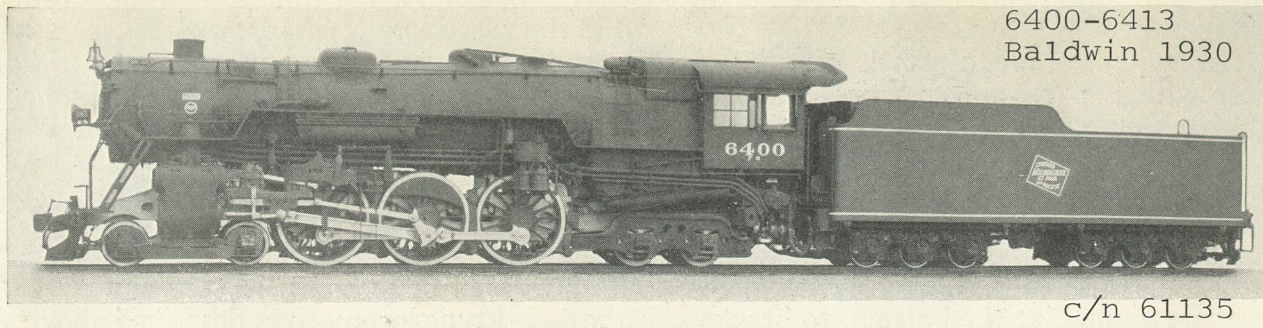

CHICAGO
MILWAUKEE
ST. PAUL
AND
PACIFIC
LINES ELECTRICALLY OPERATED 216 MILES
LINES ELECTRICALLY OPERATED 440 MILES
America's Longest Electrified Railroad—656 Miles of Transcontinental Line Now Operated by "White Coal"
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
WASHINGTON
OREGON
IDAHO
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
WYOMING
NEBRASKA
NEVADA
UTAH
COLORADO
KANSAS
MINNESOTA
IOWA
WISCONSIN
MICH.
ILL.
MO.
INDIANA
OHIO
YELLOWSTONE NATIONAL PARK
PROFILE OF MAIN LINE
CHICAGO-ST. PAUL-MINNEAPOLIS to SEATTLE-TACOMA
ELEVATIONS SHOWN IN FEET ABOVE SEA LEVEL
Indicates Double Track
6132-TT
POOLE BROS. INC., CHICAGO

The Milwaukee Road is a Vital Part of America's Transportation System

TRAVELED



**A 4-6-4 Type Locomotive of Class F6 in Service on the Chicago, Milwaukee, St. Paul & Pacific Railroad**
The train is No. 17, *The Columbian*, and the view is near Milwaukee, Wisconsin.

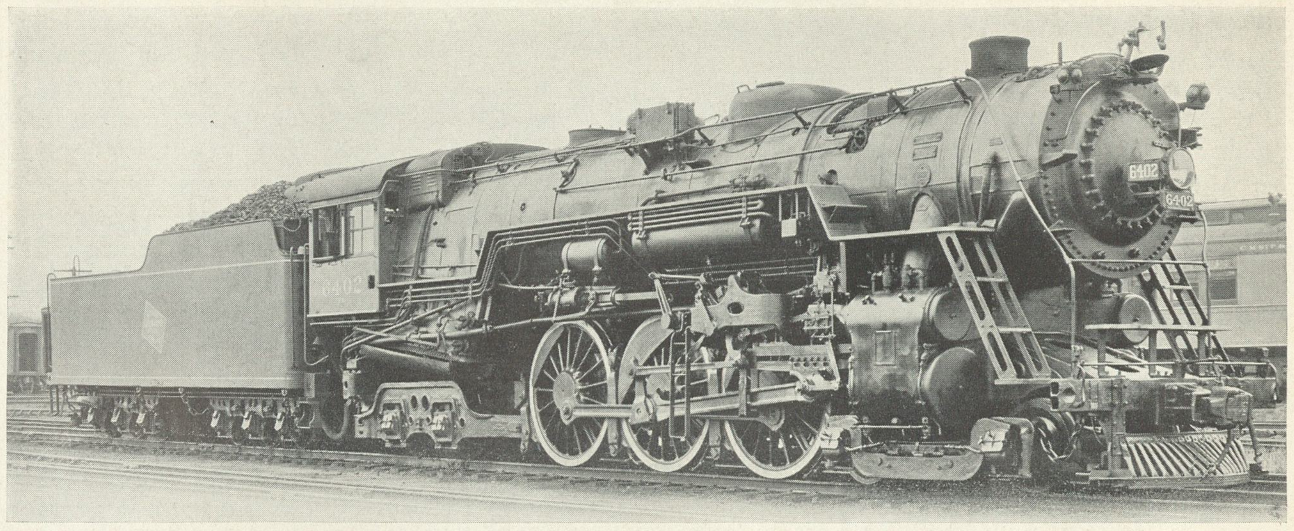


6400-6413
Baldwin 1930

c/n 61135
renoed 125

**4-6-4 Type Locomotive, Class F-6, Chicago, Milwaukee, St. Paul & Pacific Railroad**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 26″ x 28″ | Tubes, number | 3½″, 182; 2¼″, 58 | Wheel base, driving | 14′ 0″ | Weight, total engine | 375,850 lb. |
| Drivers, diam. | 79″ | “ length | 19′ 0″ | “ “ total engine | 40′ 9″ | “ “ “ and | |
| Boiler, diam. | 82″ | Grate area | 80 sq. ft. | “ “ “ “ and | | tender | 665,000 lb. |
| Steam pressure | 225 lb. | Water heating surface | 4205 sq. ft. | tender | 81′ 7½″ | Tank capacity | 15,000 U. S. gal. |
| Firebox | 120⅛″ x 96″ | Superheating surface | 1815 sq. ft. | Weight on drivers | 189,720 lb. | Fuel “ | 20 tons |
| Tubes, diam. | 3½″ & 2¼″ | | | | | Tractive force | 45,820 lb. |



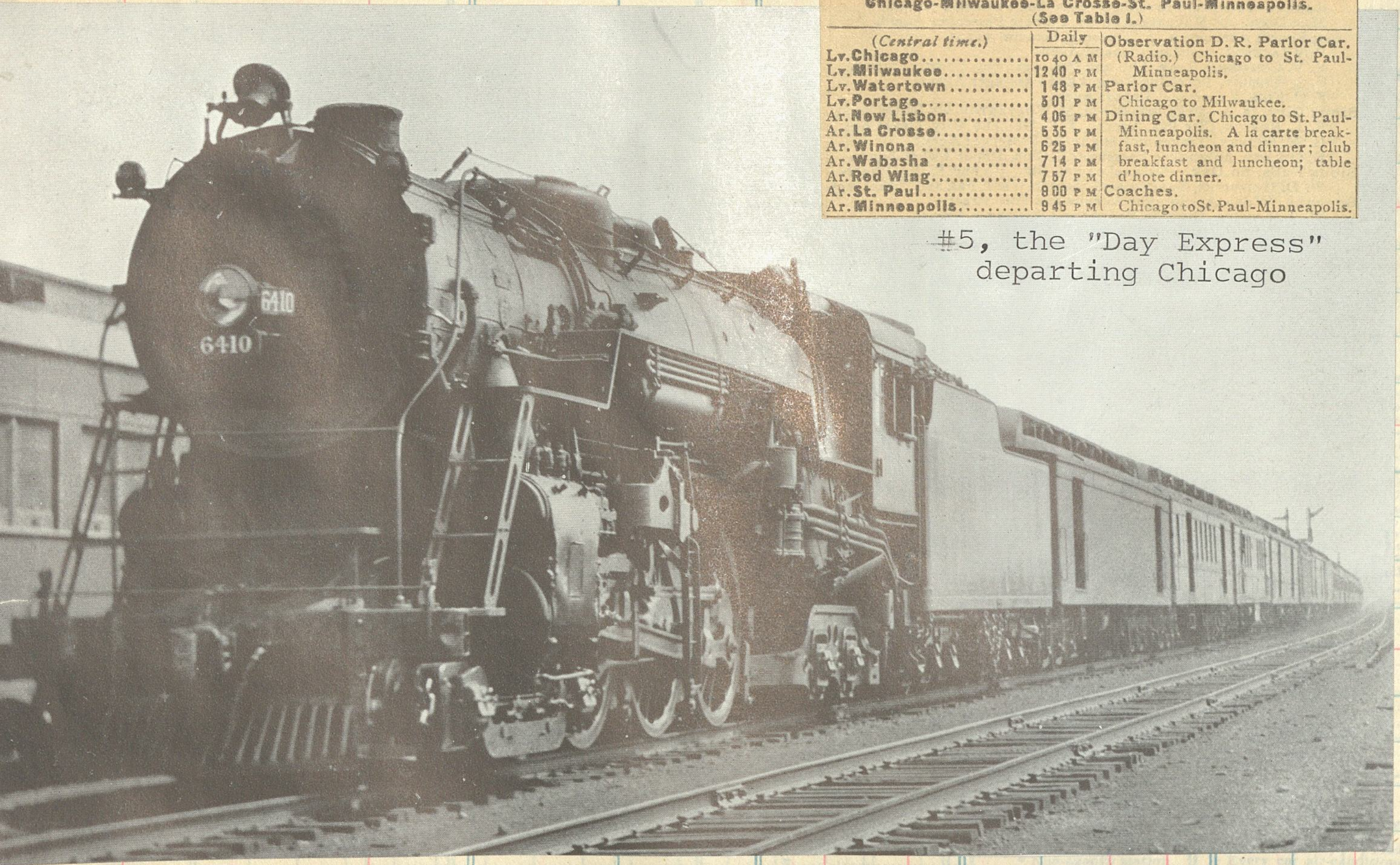
*Milwaukee, St. Paul and Pacific Locomotive Number 6402, which broke the world's record for sustained steam train speed by hauling a five-car train 68.9 miles at an average speed of 89.92 miles per hour.* July 1934

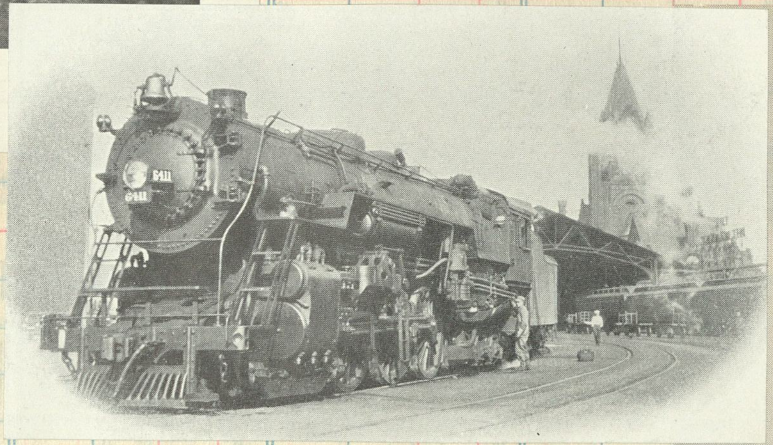
1934

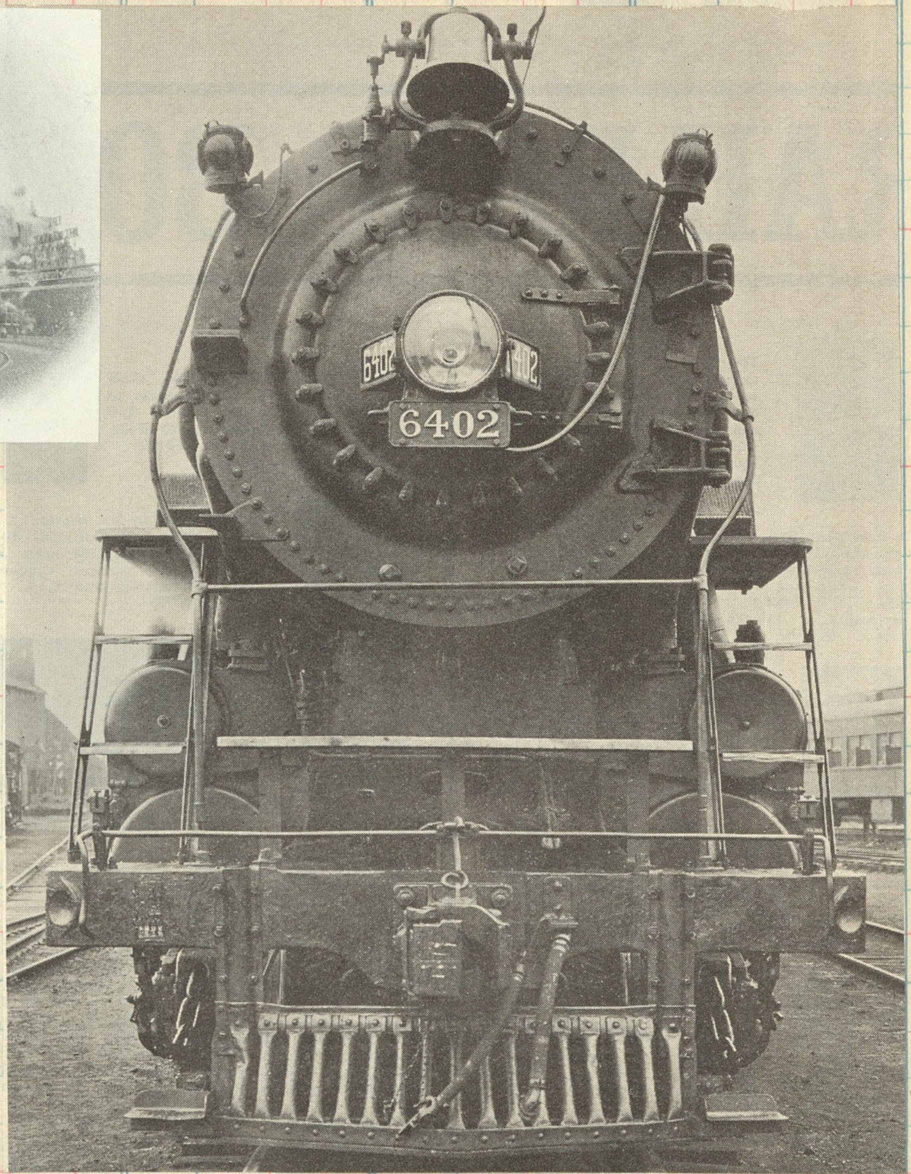
**No. 5—THE DAY EXPRESS.**
**Chicago-Milwaukee-La Crosse-St. Paul-Minneapolis.**
**(See Table I.)**

| *(Central time.)* | Daily | |
|---|---|---|
| Lv. Chicago | 10 40 A M | Observation D. R. Parlor Car. (Radio.) Chicago to St. Paul-Minneapolis. |
| Lv. Milwaukee | 12 40 P M | |
| Lv. Watertown | 1 48 P M | Parlor Car. |
| Lv. Portage | 3 01 P M | Chicago to Milwaukee. |
| Ar. New Lisbon | 4 06 P M | Dining Car. Chicago to St. Paul-Minneapolis. A la carte breakfast, luncheon and dinner; club breakfast and luncheon; table d'hote dinner. |
| Ar. La Crosse | 5 35 P M | |
| Ar. Winona | 6 25 P M | |
| Ar. Wabasha | 7 14 P M | |
| Ar. Red Wing | 7 57 P M | |
| Ar. St. Paul | 9 00 P M | Coaches. |
| Ar. Minneapolis | 9 45 P M | Chicago to St. Paul-Minneapolis. |

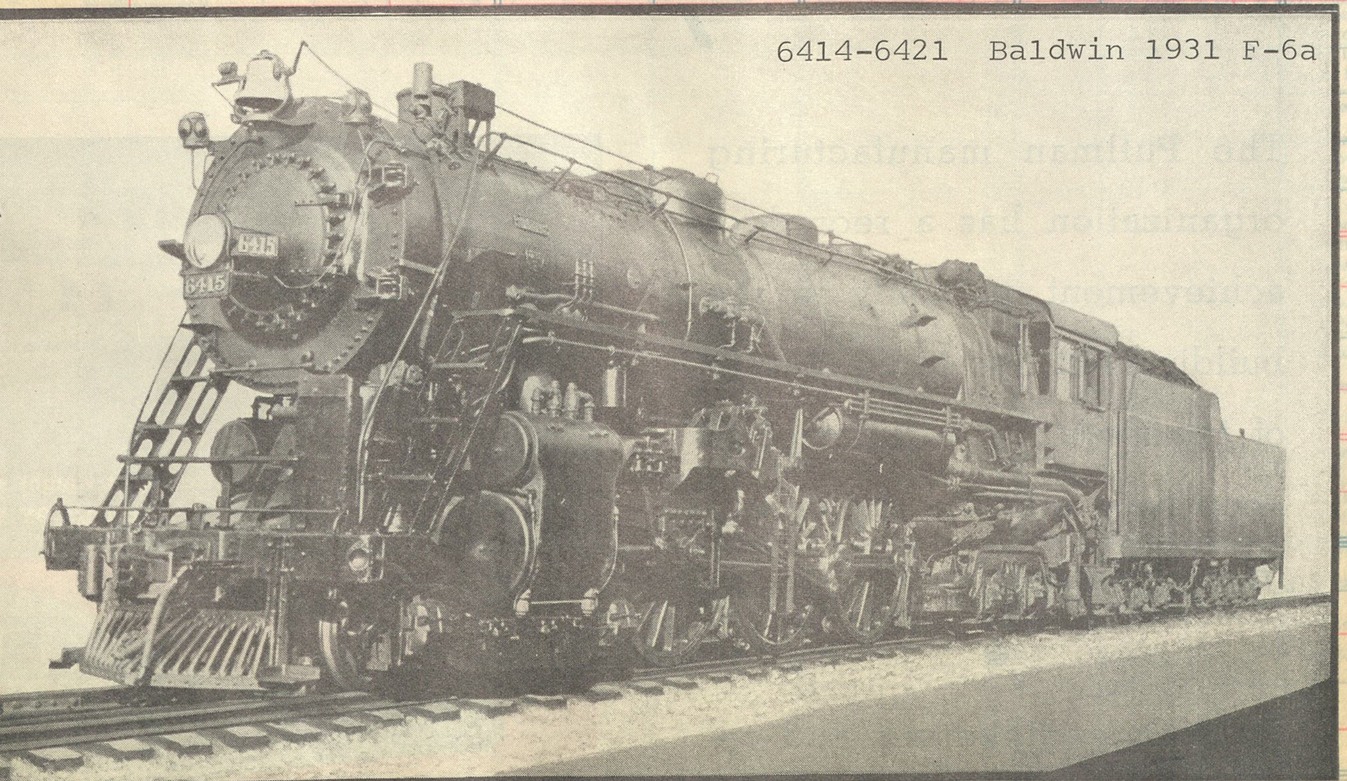
#5, the "Day Express"
departing Chicago

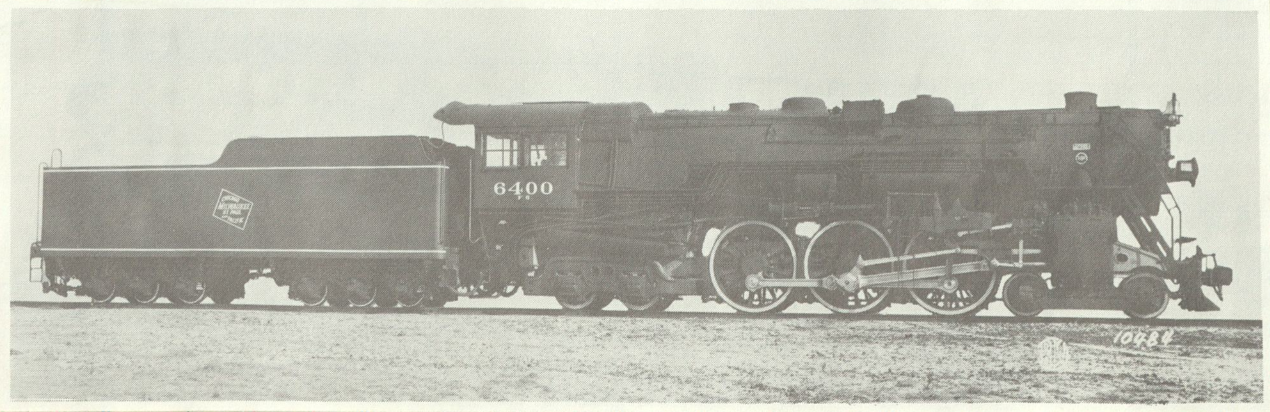






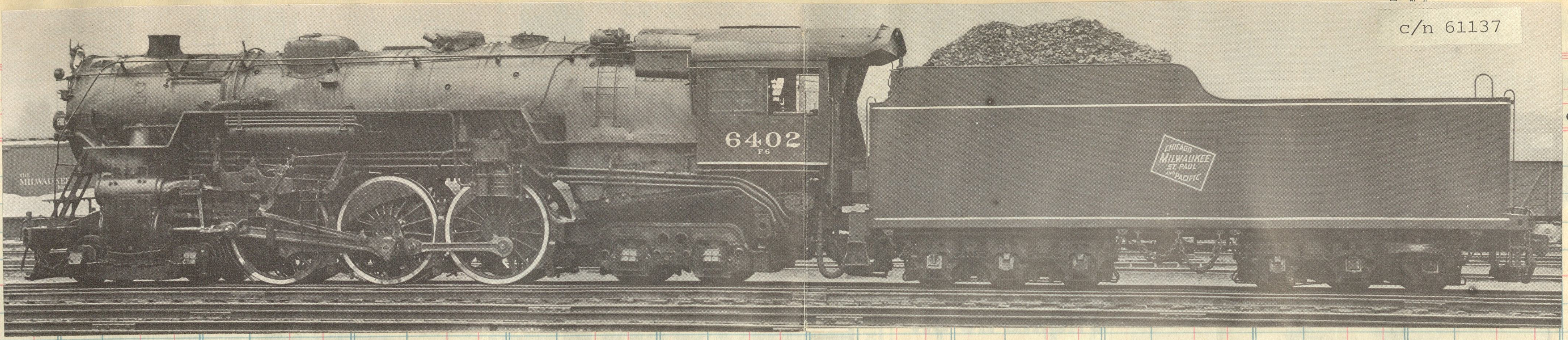
6414-6421 Baldwin 1931 F-6a

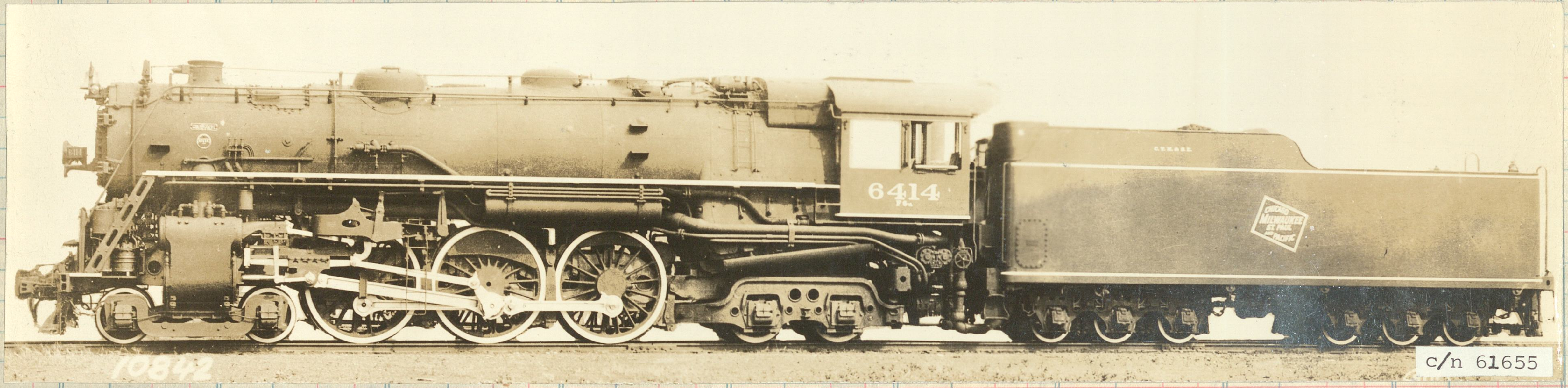




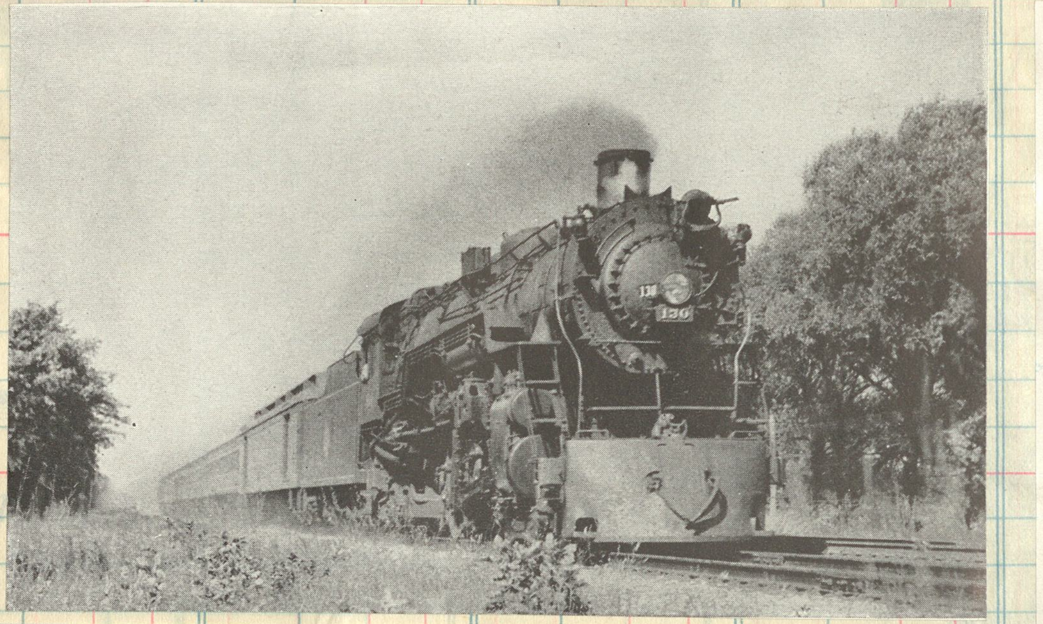
Clos. No. Sold

Clos. No. Sold Amount

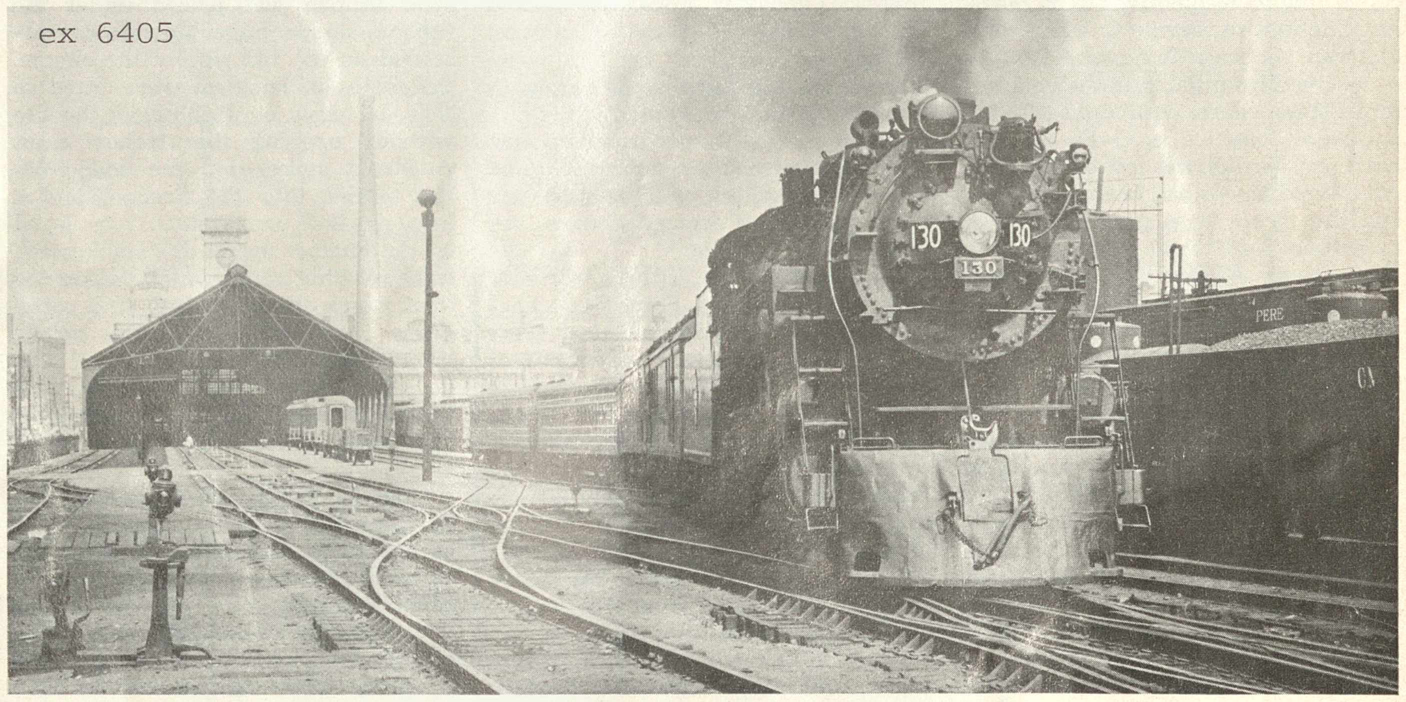

c/n 61137
6402
F6
CHICAGO MILWAUKEE ST. PAUL AND PACIFIC


6414
F6
10842
c/n 61655

Except for the lack of funds, these might have been the first 4-6-4's in United States. Plans were laid aside until 1930, and, no doubt they were modified before actual construction. Yet Baldwin stuck to its "square lines" design as compared to the trim appearence of the New York Central Hudsons blt by Schenectady.

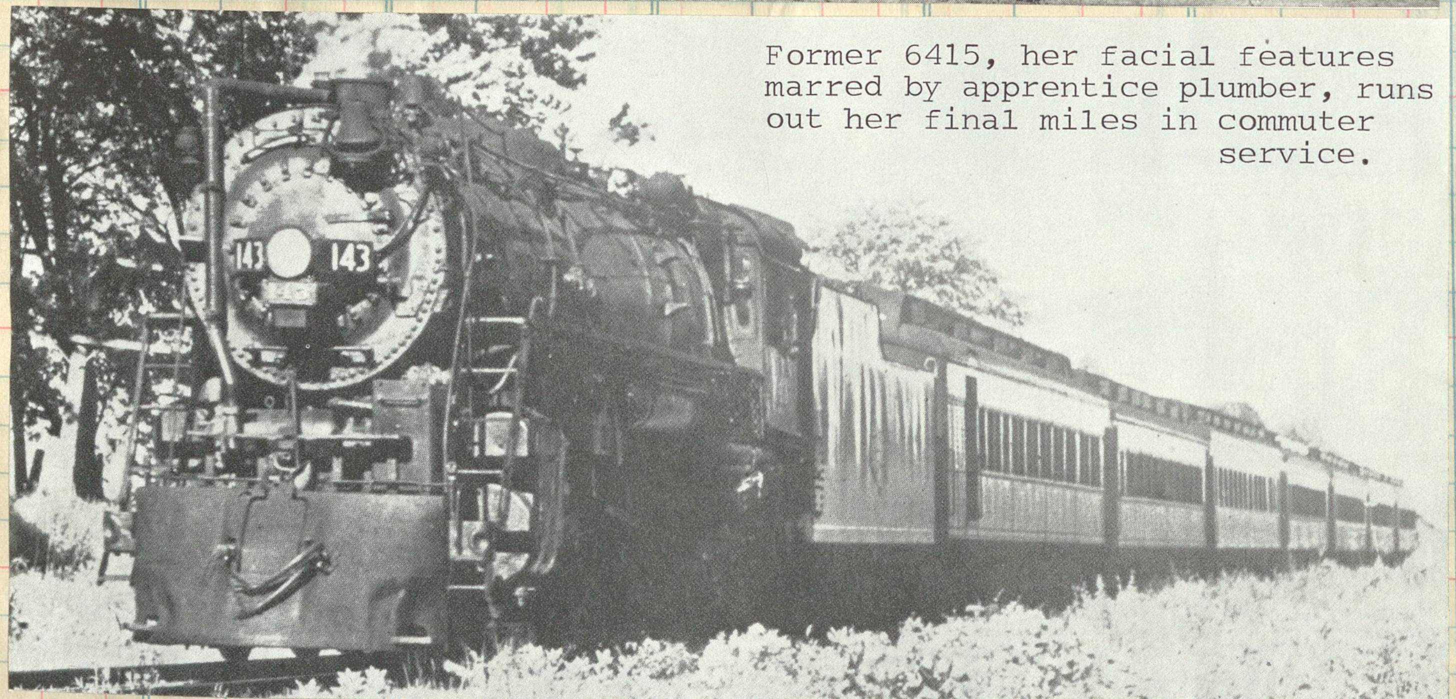


ex 6405

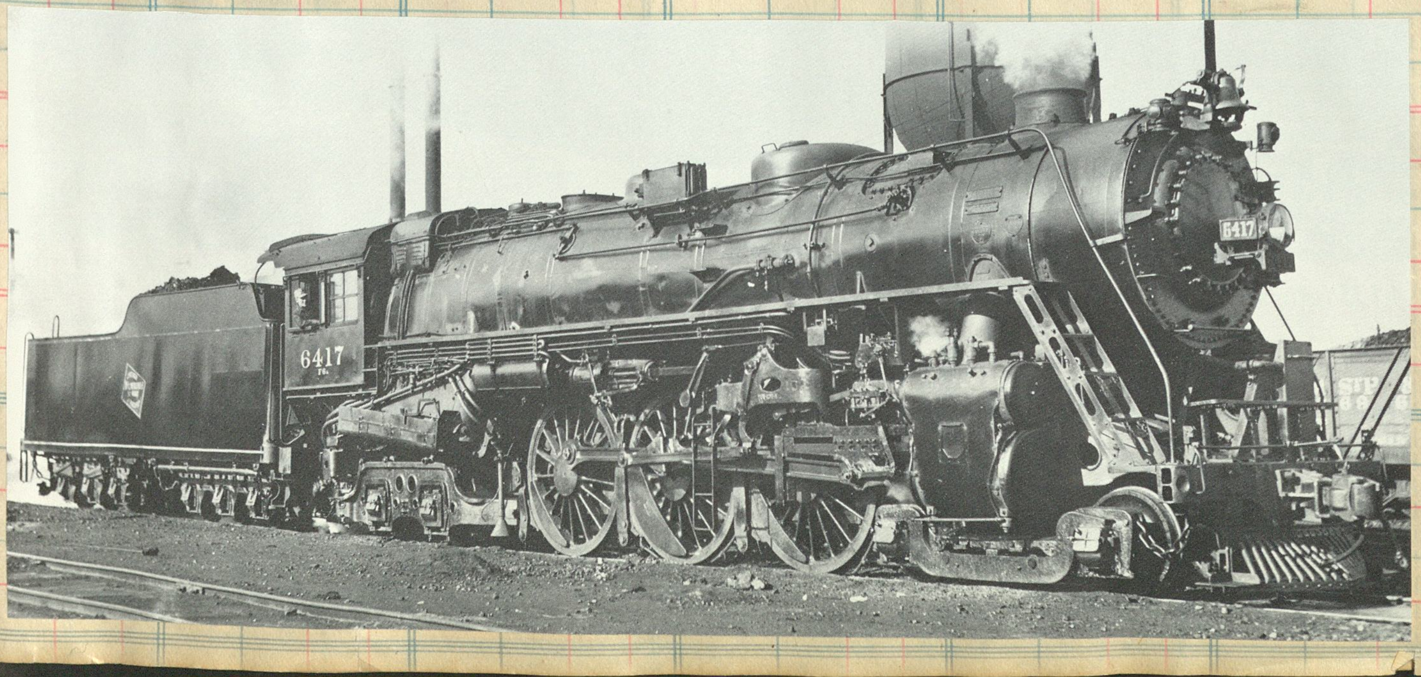


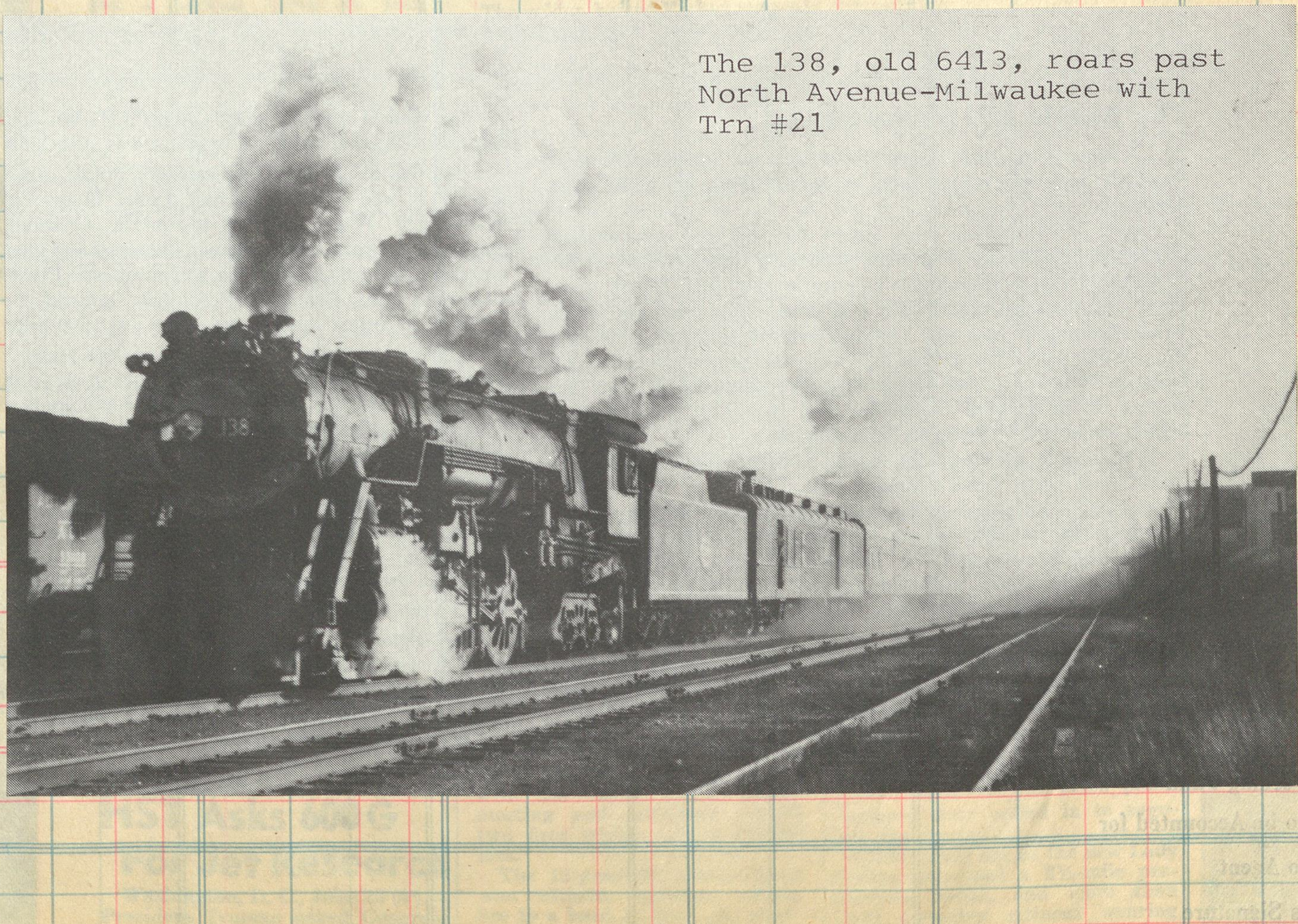
Henry J. McCord.

*"IF EVER there was a passenger workhorse, Milwaukee's No. 58 was it." F-6 No. 130 starts the local out of Minneapolis.*



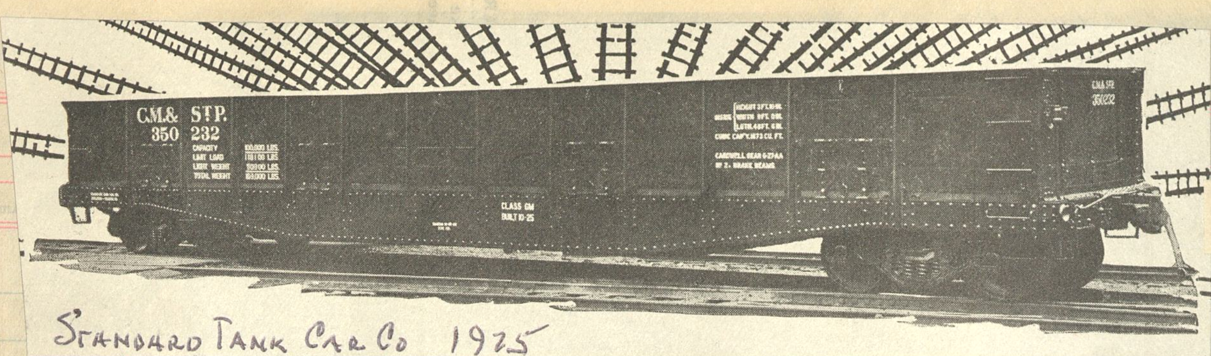
Former 6415, her facial features marred by apprentice plumber, runs out her final miles in commuter service.





The 138, old 6413, roars past North Avenue-Milwaukee with Trn #21

System



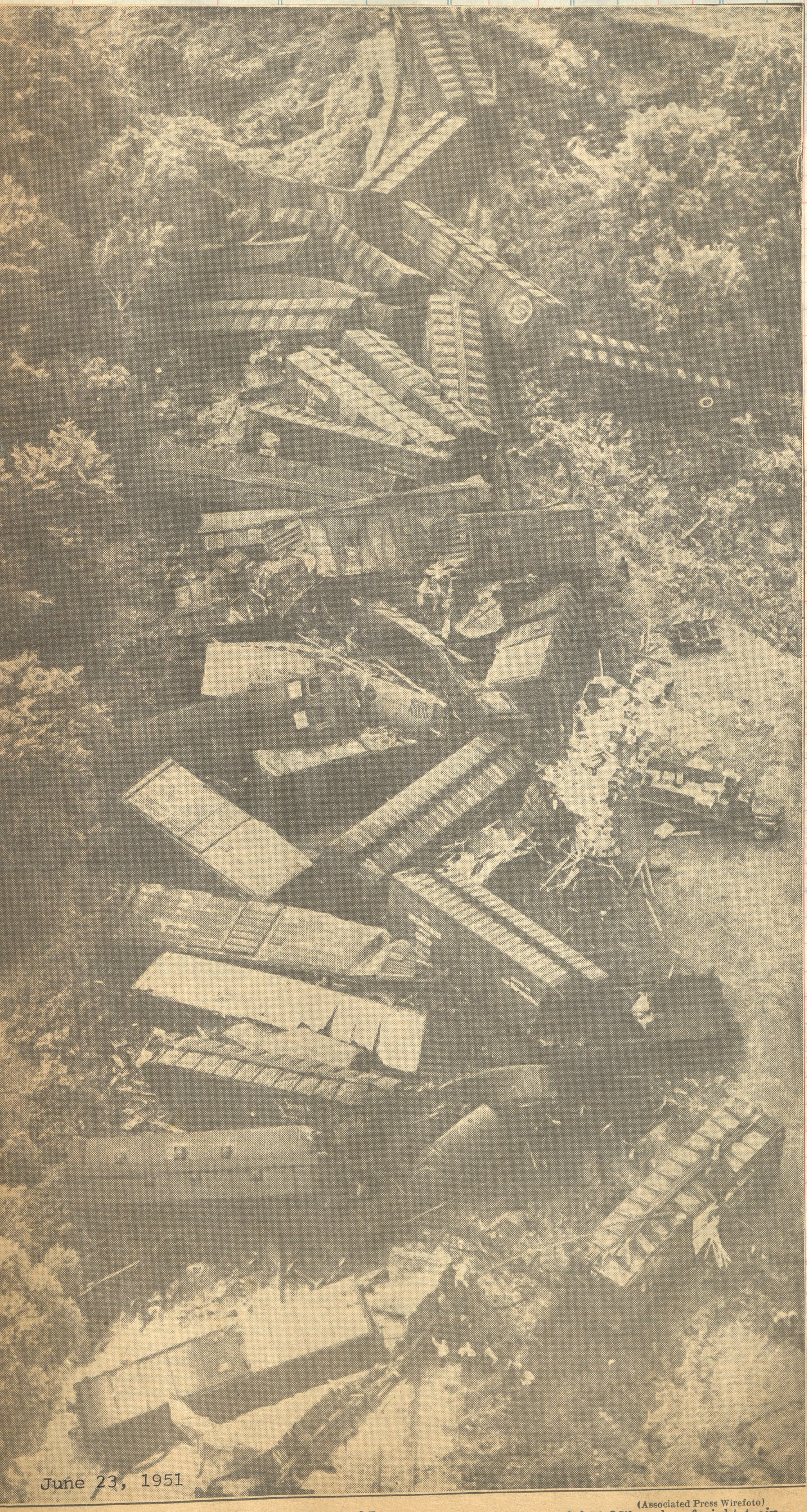
Standard Tank Car Co 1925

350000-
350499

OKM

**Lake Pepin, Minnesota**
**Upper Mississippi River**

The scenery along the upper Mississippi is unrivalled in beauty. Cliffs, islands, lakes, pass in endless procession as the trail skirts the water's edge for 127 miles.



June 23, 1951

(Associated Press Wirefoto)

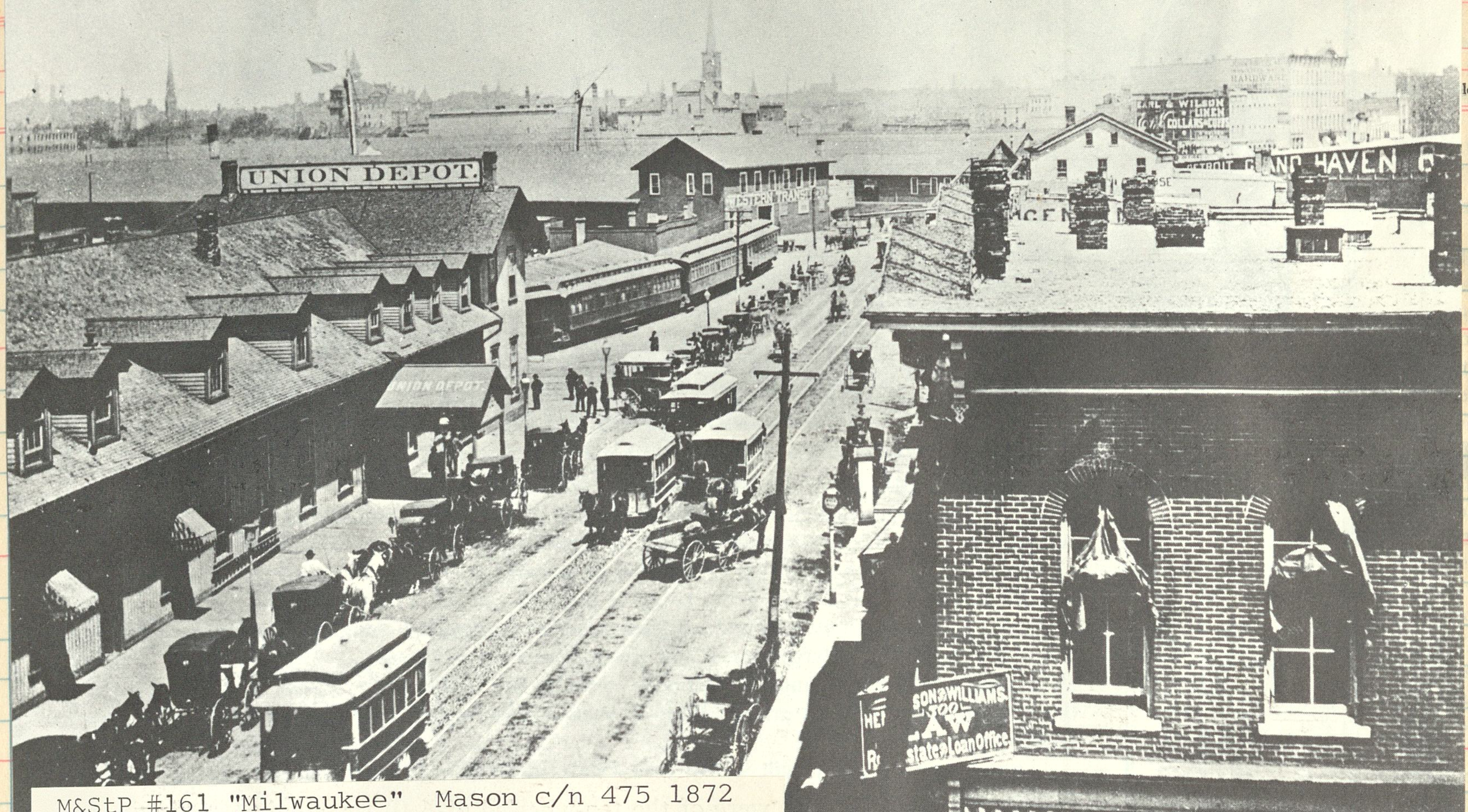
**Shells Remain Mum in Pileup.** Forty-five cars of fast Milwaukee freight train lie piled atop one another after the train was erailed near Panama, Ia. Five cars contained 16-inch Navy shells which failed to explode. Damage: $500,000.

*Beauty and the Bridge*

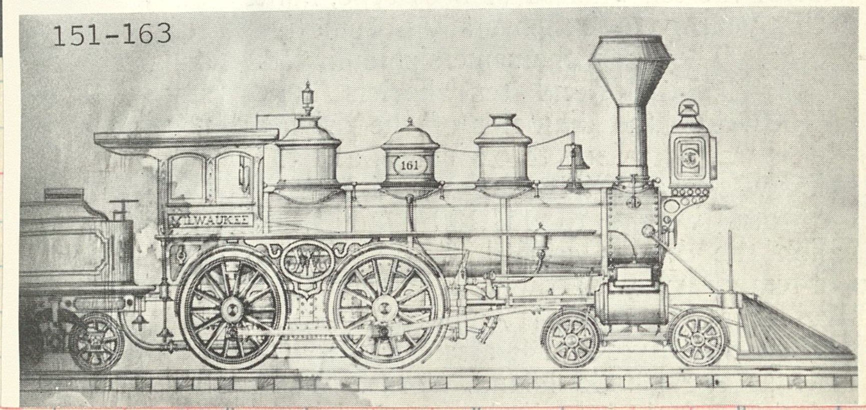
**Milwaukee Road's Engine 262 crossing bridge between Madrid and Woodward, Iowa**

(Photo by Floyd Lutze, Jr., Courtesy Perry, Ia., Daily Chief)

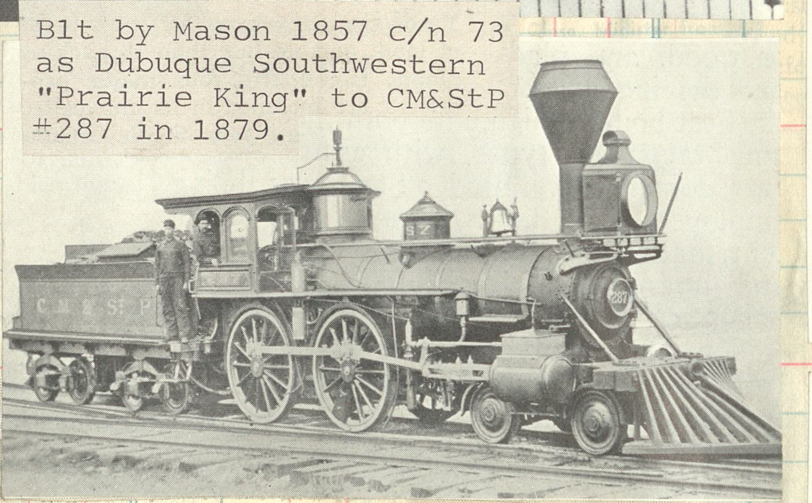
The first Union Station at Milwaukee, used by the Milwaukee & Prairie du Chien and the Wisconsin Central. Removed in 1886



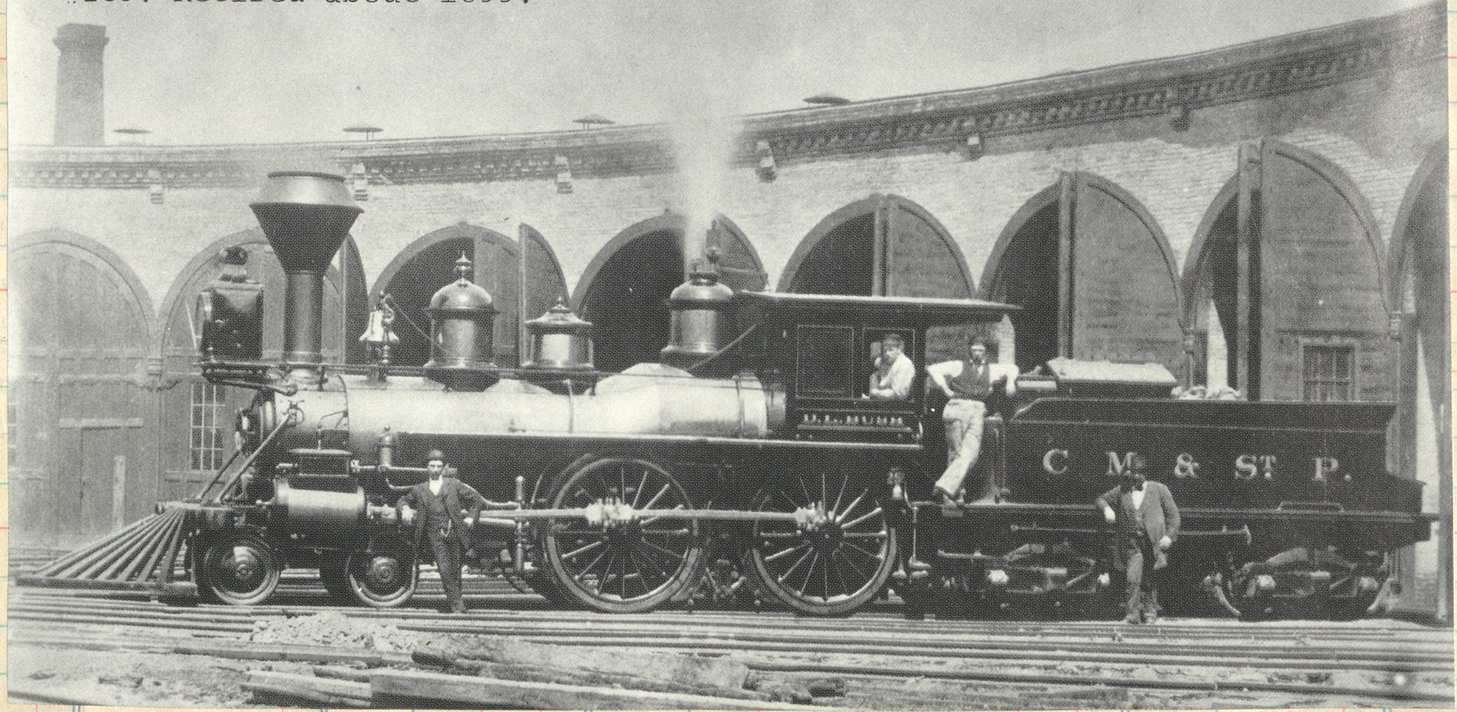
M&StP #161 "Milwaukee" Mason c/n 475 1872



Blt by Mason 1857 c/n 73 as Dubuque Southwestern "Prairie King" to CM&StP #287 in 1879.

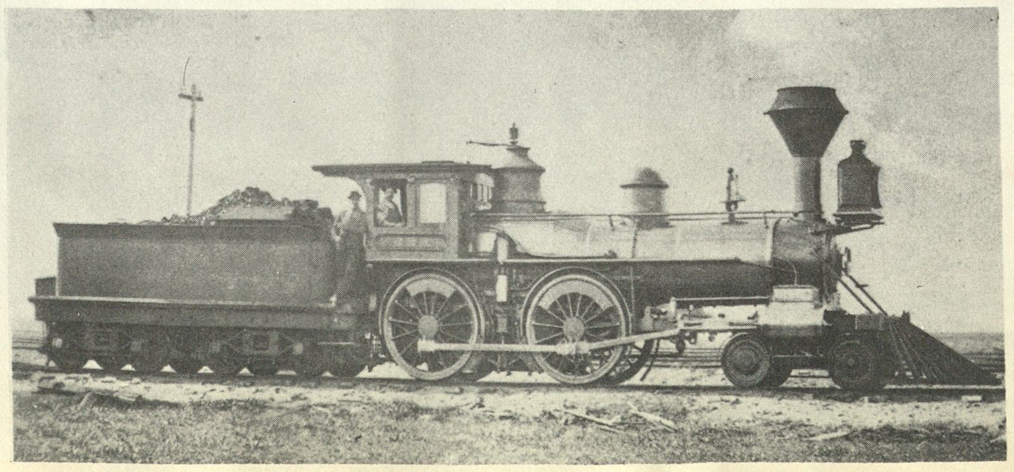


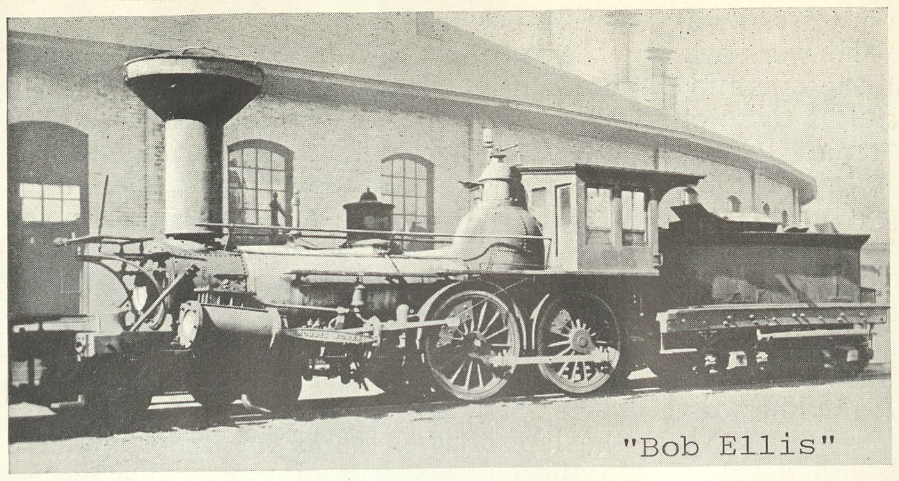
Built by Niles in 1856 as Racine & Mississippi "Rockton". Then to Western Union #12 the "D.L.Bush", reblt 1874. in 1879 to CM&StP #259. Retired about 1899.



**MILWAUKEE & ST. PAUL RAILROAD** was renamed the Chicago, Milwaukee & St. Paul Railway early in 1874. The original road acquired the St. Paul & Chicago Railroad, running up the west bank of the Mississippi from La Crescent, opposite La Crosse, in 1872, the year it was completed. Later acquisitions included such historic Minnesota roads as the Southern Minnesota Railroad and the Hastings & Dakota Railroad, along with the Minnesota Central Railroad. The Hastings & Dakota line ran from Hastings, on the Mississippi, to Glencoe, crossing the north-south route of the Minnesota Central at Farmington. The Southern Minnesota Railroad operated from Grand Crossing, opposite La Crosse, but the initial construction started around Hokah, on the Root River some 8 miles west of its junction with the Mississippi. The first engine, shipped up the Root River to Hokah, bore the name SHERWOOD in honor of a director, Lieutenant Governor Sherwood. This road formed the eastern end of the present Milwaukee line running west to Albert Lea, Mankato, and Pipestone. When the road was completed from Hokah to the Mississippi, the river was solidly frozen over and the first shipments of freight were hauled across on the ice by teams to the La Crosse connection. Part of the Milwaukee lines in Iowa were acquired through the purchase of the Sabula, Ackley & Dakota Railroad, 87 miles from Sabula to Marion. Engine 222 of the Chicago Milwaukee & St. Paul is shown here at Madrid, Iowa, in 1890. Schenectady's No. 1093, the neat 4-4-0 was built in August, 1878. (Collection of Dr. S. R. Wood)

M&StP #22, to
CM&StP #753, 206
Ret 1918

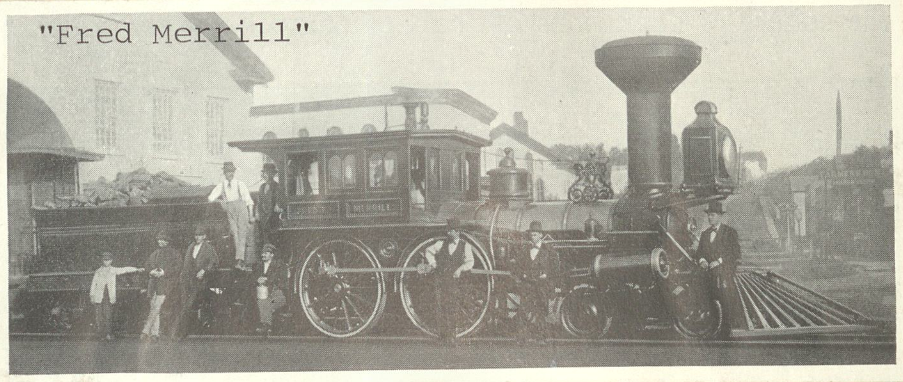




"Bob Ellis"

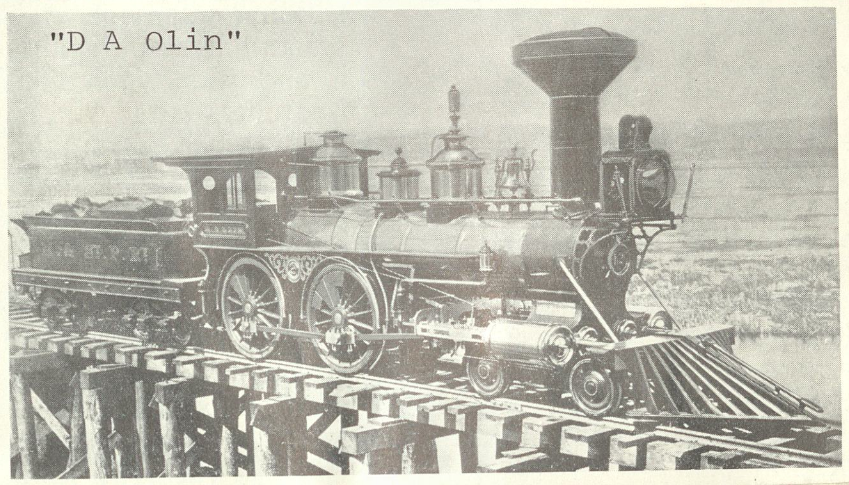
Blt by Norris at Phila in 1848 for Milwaukee & Waukesha. To Milwaukee & Mississippi #1 the "Bob Ellis". In 1861 went to Milw & Prairie du Chien then to Milw & StPaul #71 "Iowa" in 1868

"Fred Merrill"



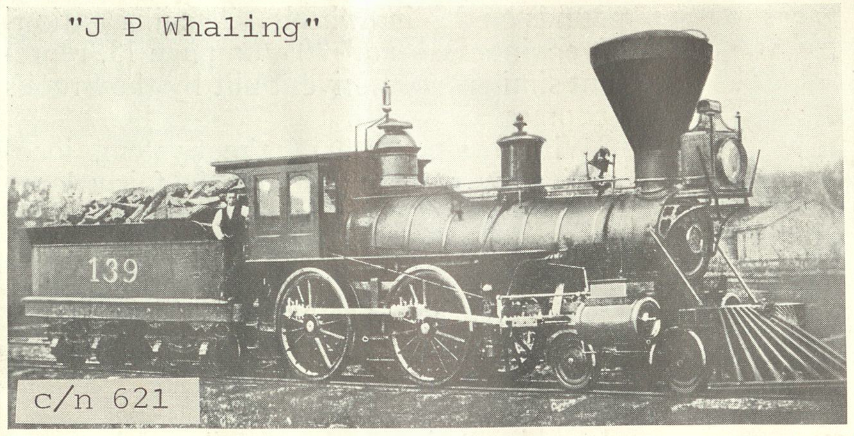
Blt by Norris 1848
Early history unknown
Came to M&StP in 1863
as #37 Reblt 1867

"D A Olin"



The "D.A.Olin" was blt by Niles 1854 for the Milwaukee & Watertown In 1856 went to the LaCrosse & Milwaukee and as #42 of Milw & StPaul in 1863. Reblt 1868 [as shown]. Was CM&StP #1438 Retired in 1904!

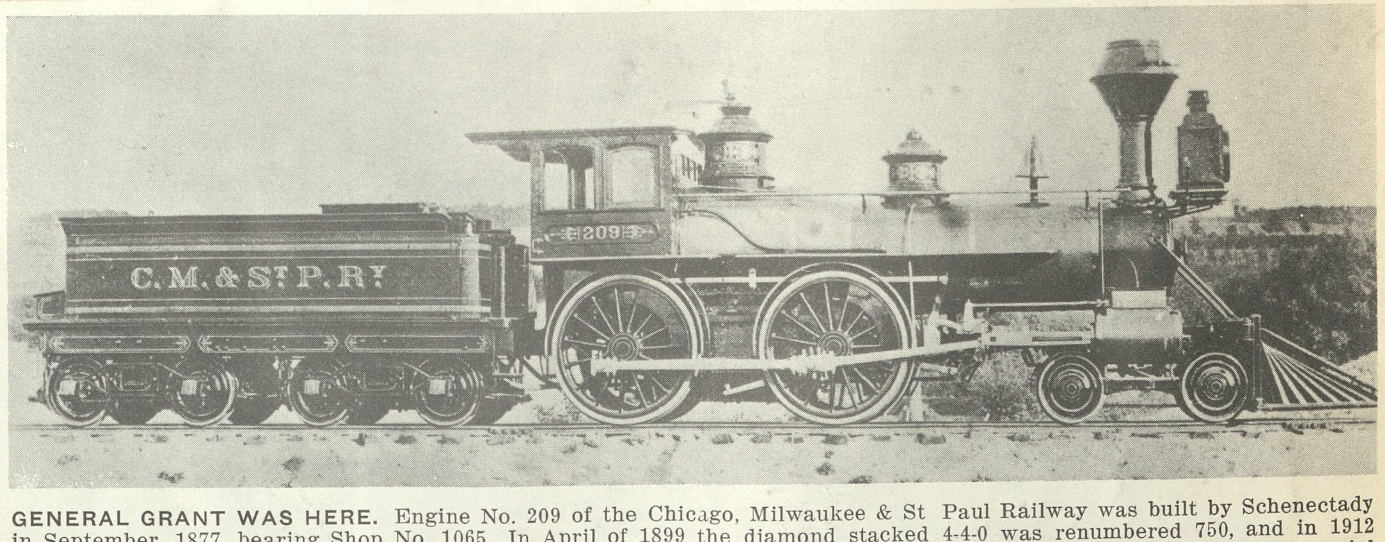
"J P Whaling"



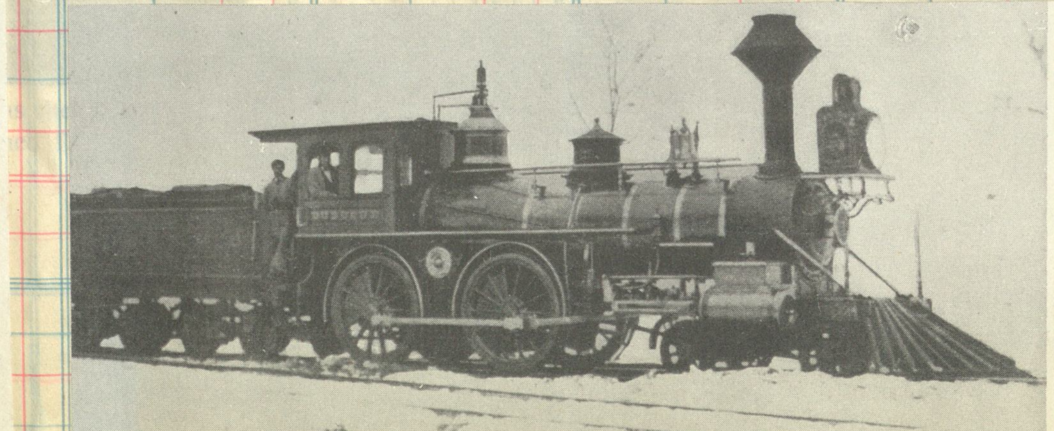
c/n 621

**Left—American Type Locomotive, Built by Danforth, Cooke & Co., 1869**

| | |
|---|---|
| Drivers, diam. | 62" |
| Grate area | 14.2 sq. ft. |
| Fuel | Wood |
| Weight, total engine | 60,500 lb. |



**GENERAL GRANT WAS HERE.** Engine No. 209 of the Chicago, Milwaukee & St Paul Railway was built by Schenectady in September, 1877, bearing Shop No. 1065. In April of 1899 the diamond stacked 4-4-0 was renumbered 750, and in 1912 she was renumbered 203. Her claim to fame was made on June 9th, 1880, when she was marked up to haul the special train bearing General Ulysses Simpson Grant from Chicago to Milwaukee. Grant, noted Civil War commander and President of the United States from 1869 until 1877, was bound for Milwaukee to attend the Annual Encampment of the Grand Army of the Republic, an association of Union veterans of the War Between the States. The Chicago, Milwaukee & St. Paul Railway, forerunner of the present Chicago, Milwaukee, St. Paul & Pacific Railroad, polished up Engine 209 for the occasion and the high-stepping American Standard whisked the General from Chicago to Milwaukee in 2 hours 10 minutes running time. Average time for modern passenger trains between the two cities is about 1 hour 40 minutes, with heavy rail and the best of present-day motive power.



**CHICAGO, DUBUQUE & MINNESOTA R.R.** was opened between Dubuque, Iowa, and La Crescent, Minnesota, in 1871; a branch from Turkey River to Elkport, Iowa, gave the line a total of 134 miles of track. Eng. 22, the DUBUQUE, was a 4-4-0 built by Hinkley in 1871.

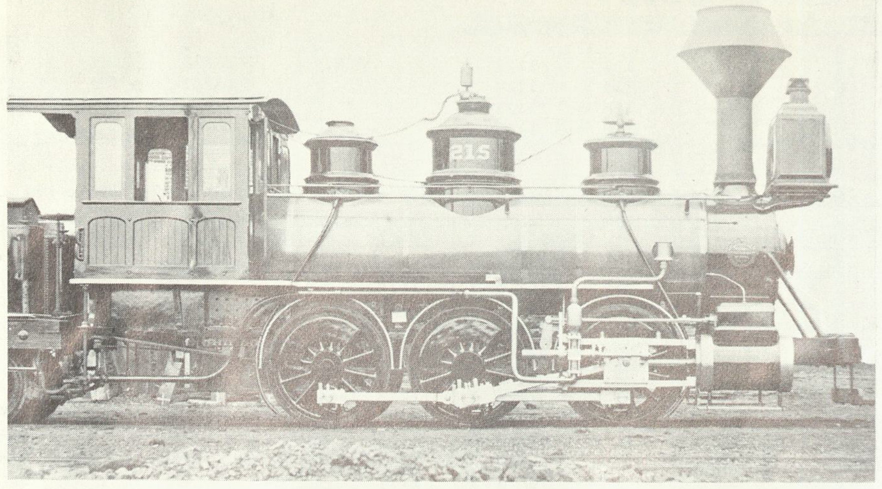
8

SELLER
DATE
FORM

S AT

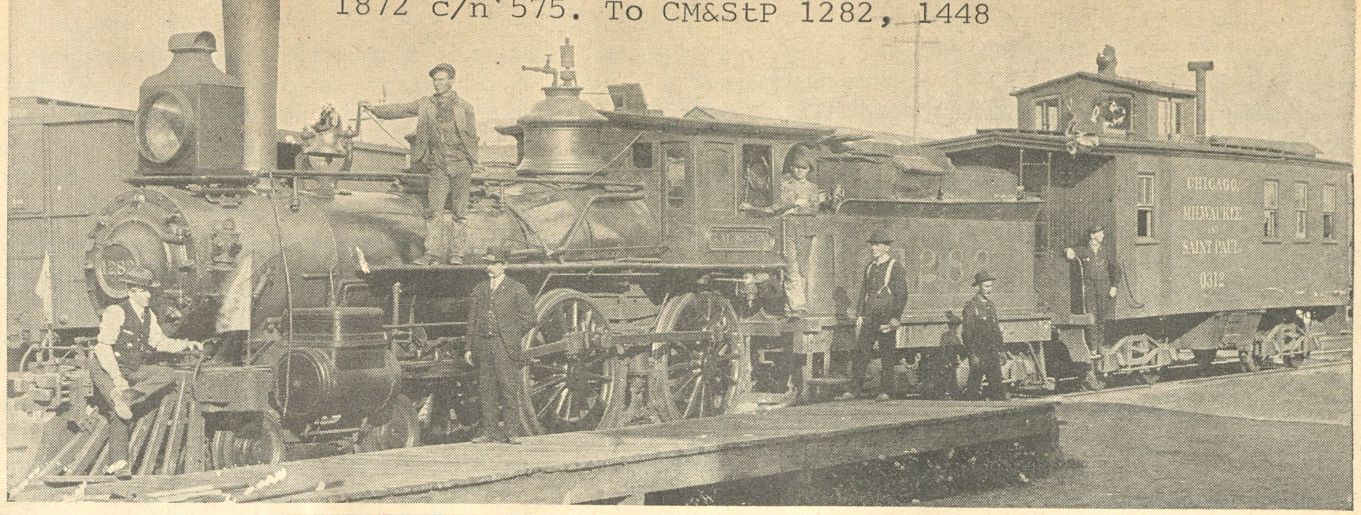
Amount Clos. No. Sold Amount Clos. No. Sold Amount

c/n 4338

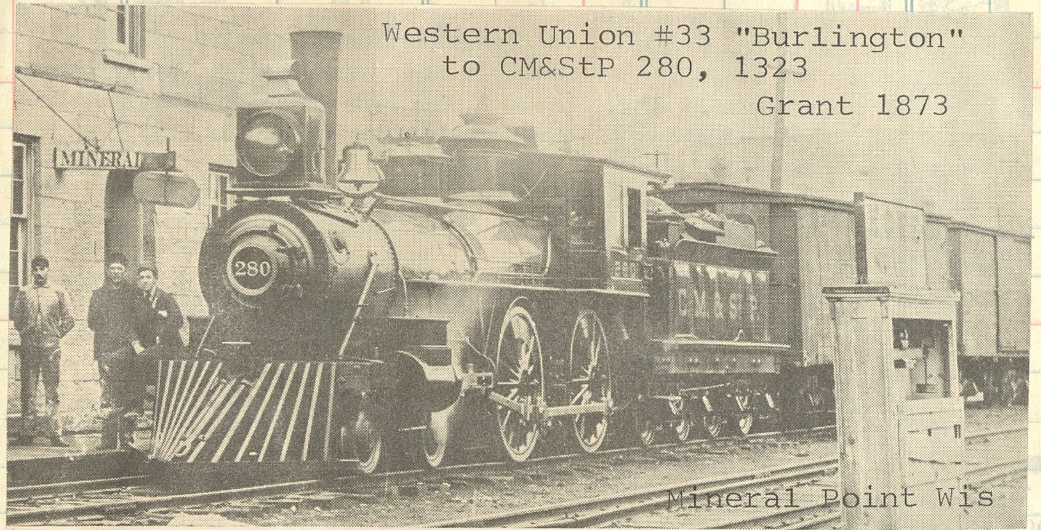


*Six wheel switcher 215 entered service in 1878 and was retired in 1917. It was Baldwin's 4338th locomotive.*

Blt as Milwaukee & StPaul #163 "Marion" by Taunton
1872 c/n 575. To CM&StP 1282, 1448

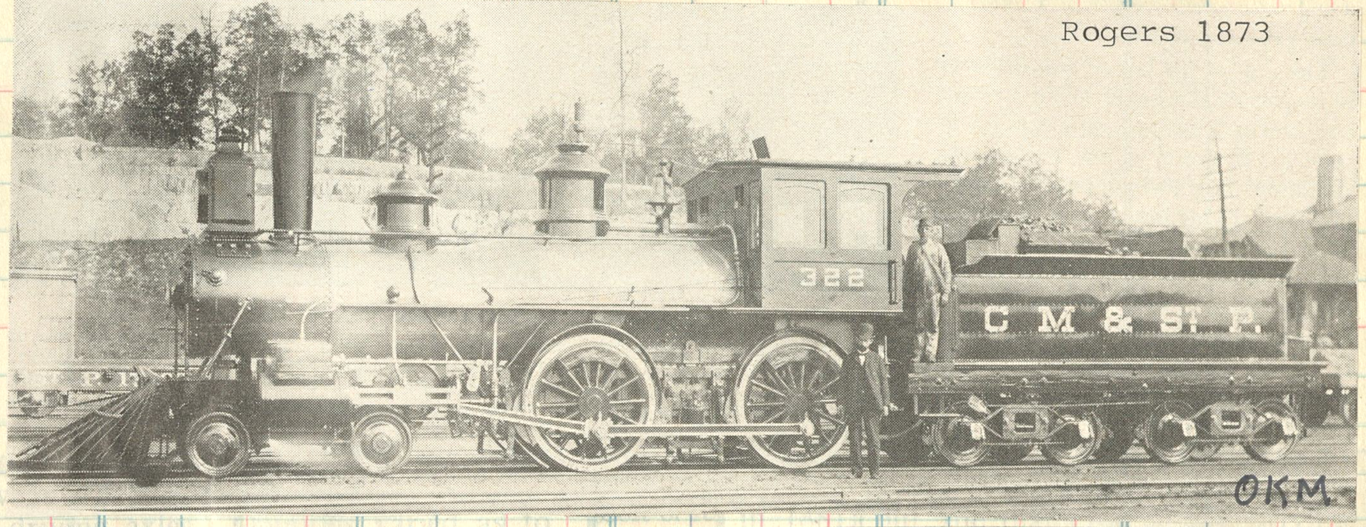


Western Union #33 "Burlington"
to CM&StP 280, 1323
Grant 1873



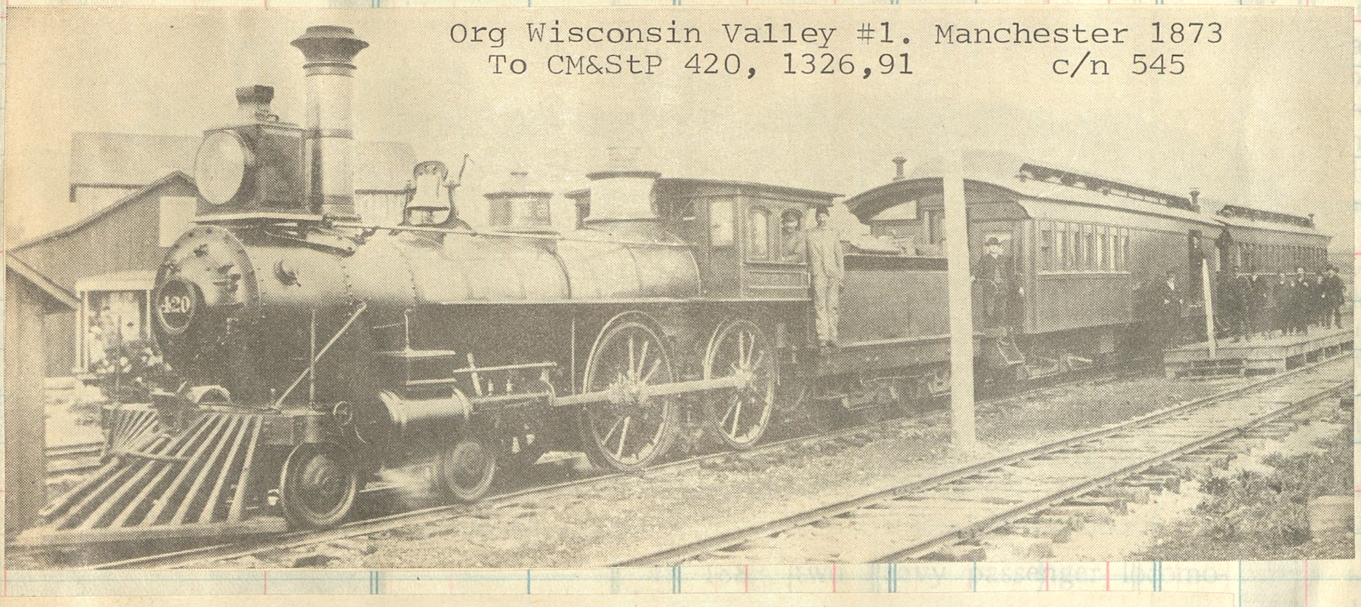
Mineral Point Wis

Rogers 1873

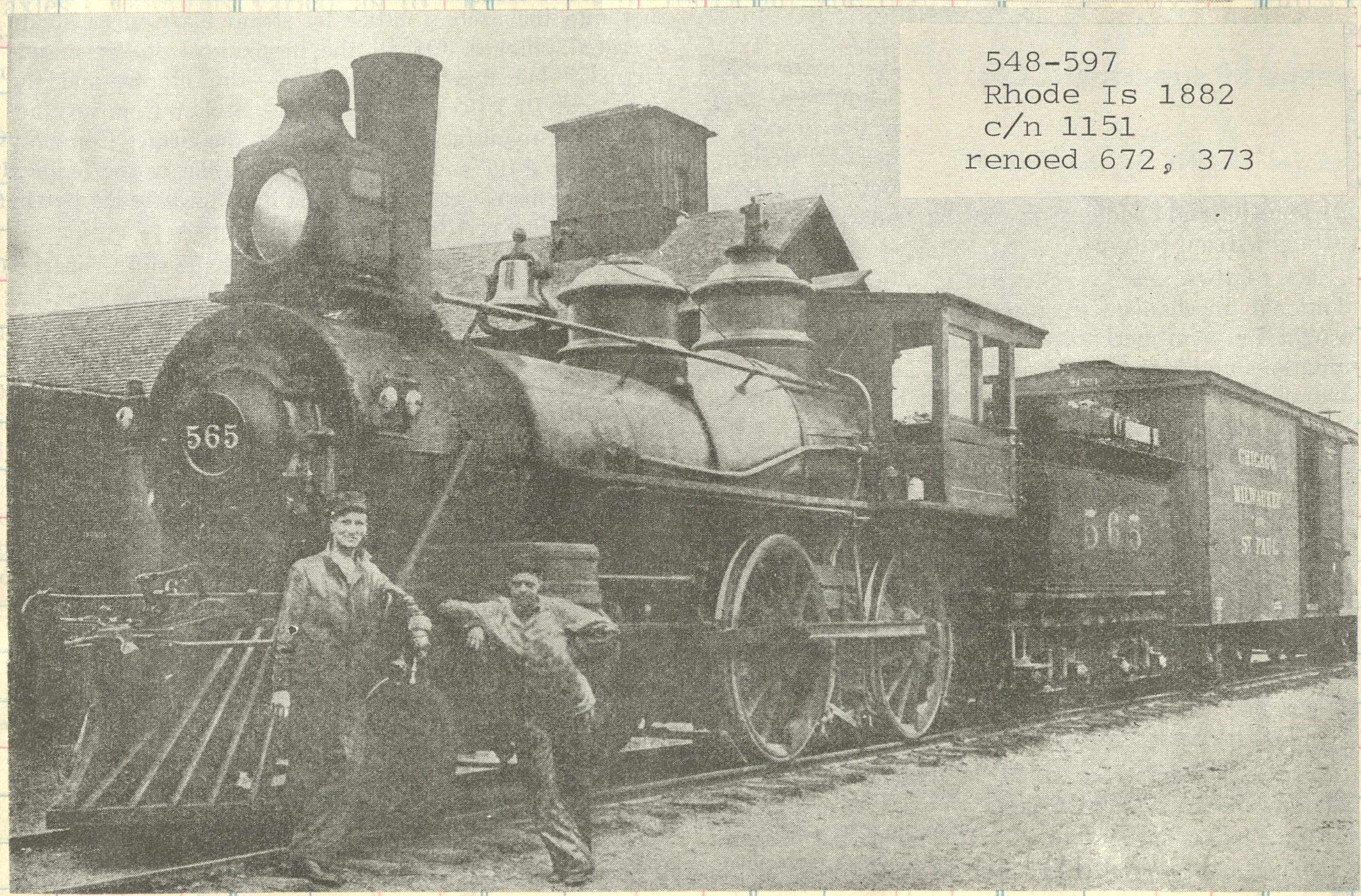


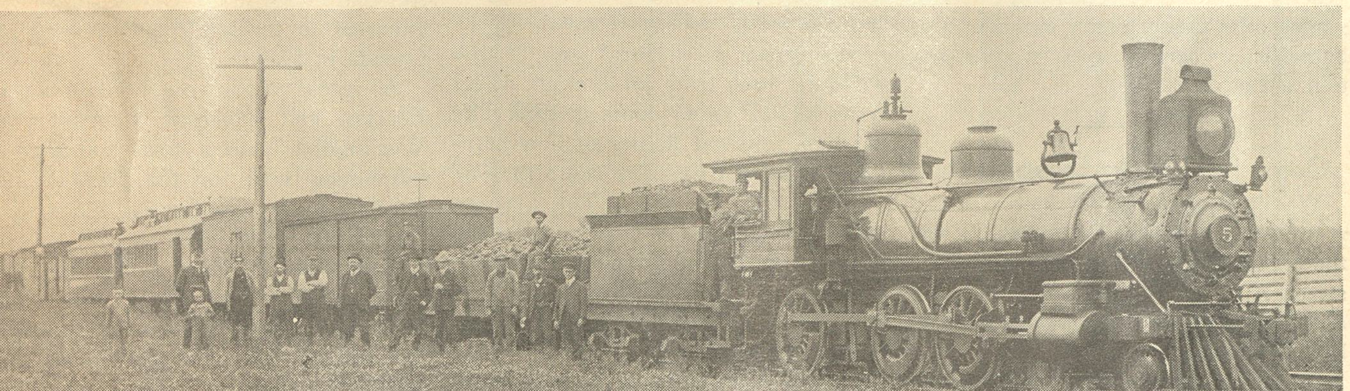
OKM.

Org Wisconsin Valley #1. Manchester 1873
To CM&StP 420, 1326,91 c/n 545



548-597
Rhode Is 1882
c/n 1151
renoed 672, 373

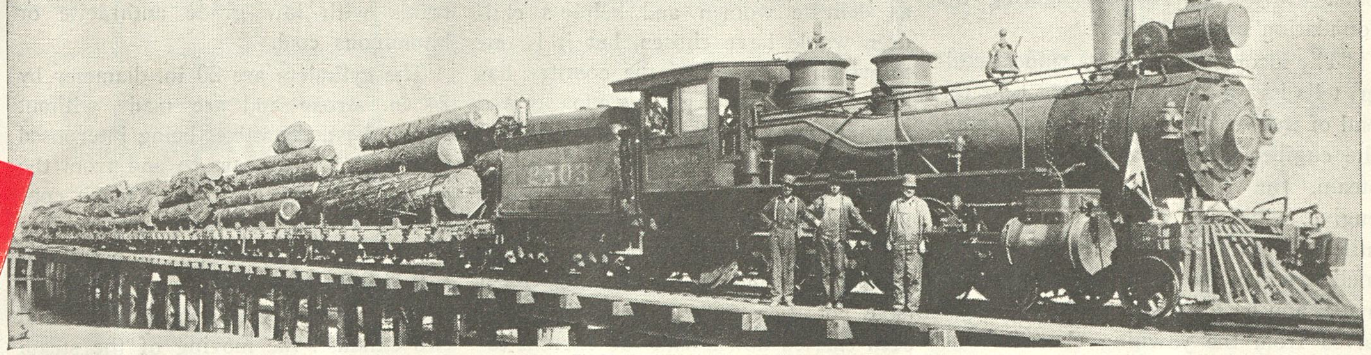




CM&StP #5 Blt as Milw & No #30 Brooks 1888
to CM&StP 930, 5, 2000 c/n 1333

CHICAGO
MILWAUKEE AND
ST. PAUL
RAILWAY

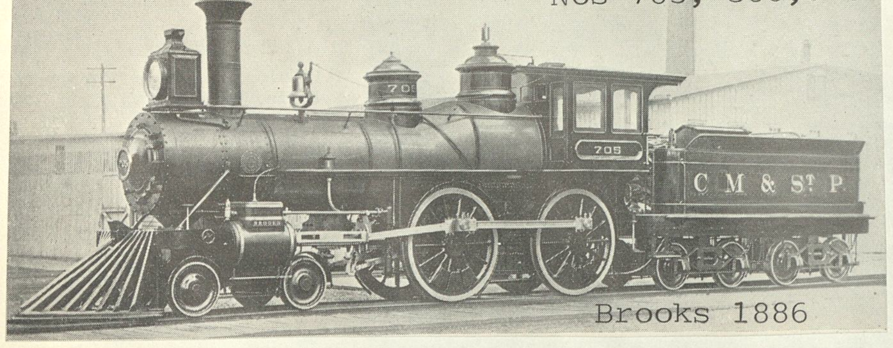
CM&StP #469 Rhode Island c/n 1056 1881
to Montana #37, to CM&PS 4404, to CM&StP 2503



FIRST TRAIN OF LOGS

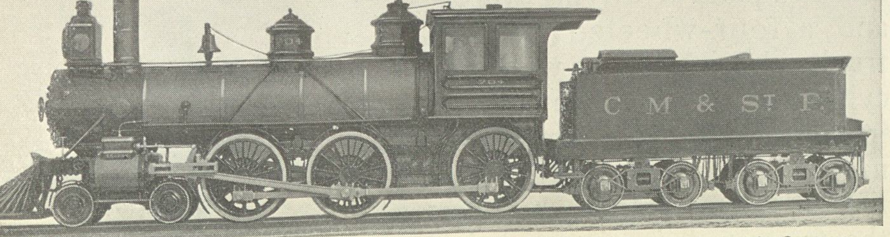
The first train of logs to enter Port Angeles, Wash., in August, 1914, is shown above. The train was hauled by Milwaukee engine 2503. The picture was sent

Nos 705, 560,510



Brooks 1886

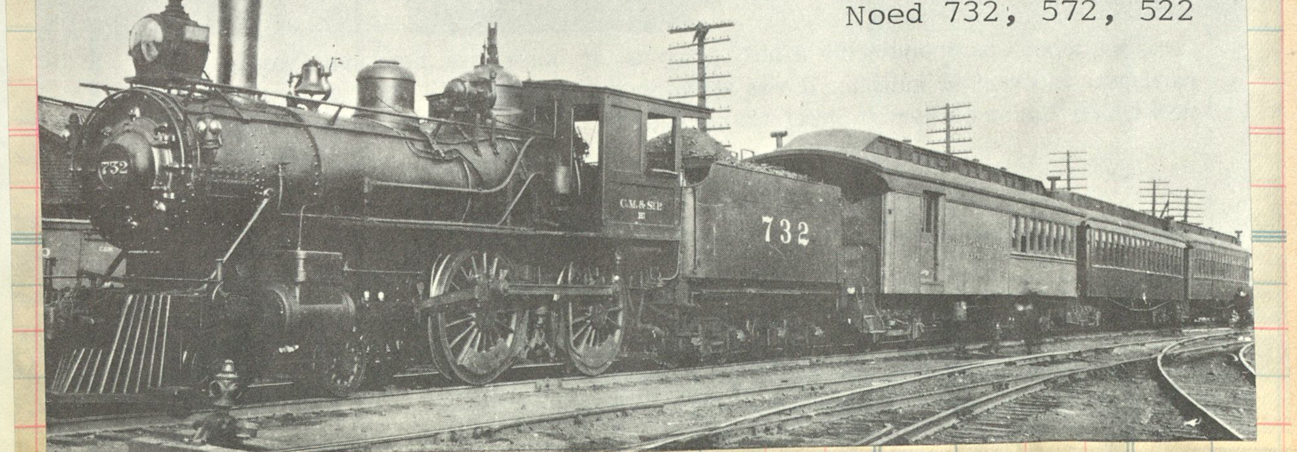
Nos 704, 100 (GV 100) 2179
c/n 1185

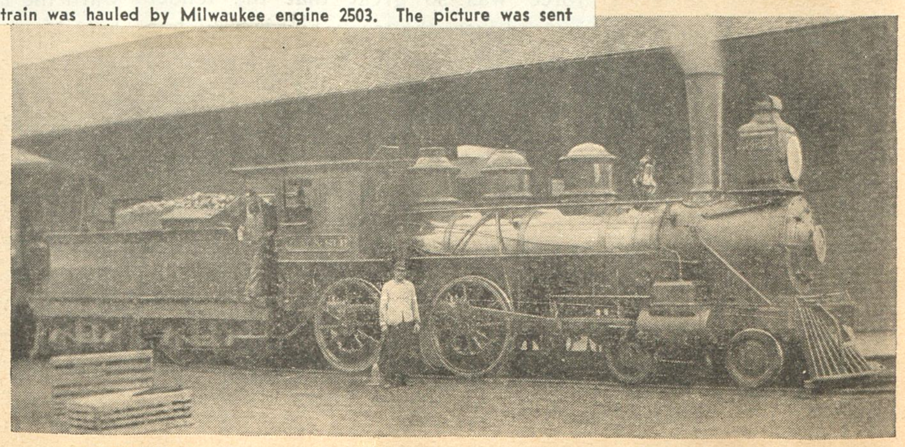


*Photos furnished by American Locomotive Company*

Passenger and Freight Locomotives Built by the Brooks Locomotive Works 1887

731-740 Grant 1887
Noed 732, 572, 522



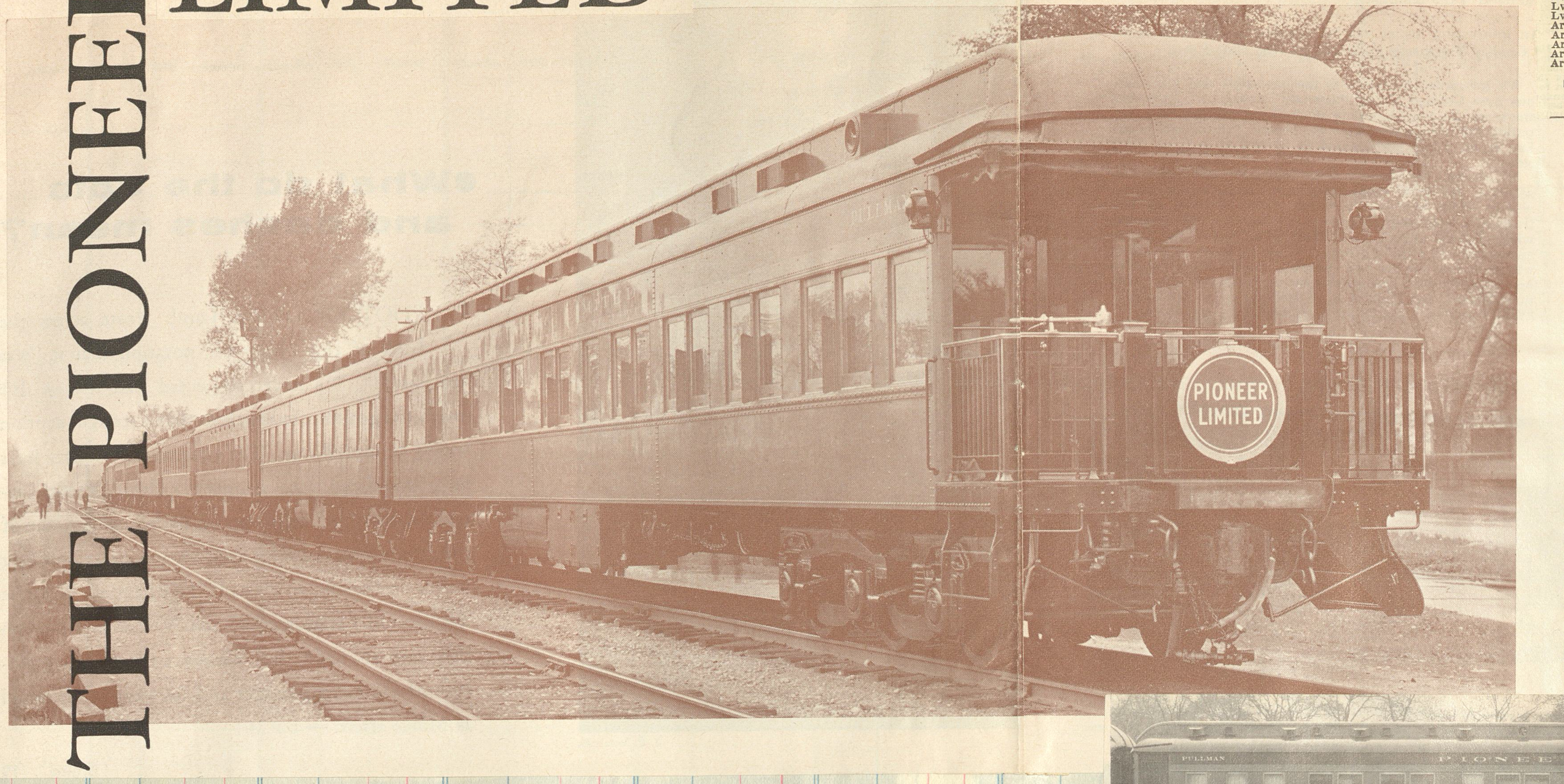


LOCOMOTIVE 1426 OF THE OLD CHICAGO, MILWAUKEE & ST. PAUL
Picture furnished by Brother A. M. Rogers, Div. 73.

Org StPaul & Chicago #2 "Alex Mitchell"
blt by Mason (#381) 1870, to M&StP #171,
to CM&StP 1251, 1426

Clos. No.

# THE PIONEER LIMITED


PIONEER LIMITED

★**No. 1—THE PIONEER LIMITED** (See Table 1)

| *Union Station* | Daily |
|---|---|
| Lv Chicago | 10.15PM |
| Lv Milwaukee | 11.55PM |
| Lv Oconomowoc | f12.38AM |
| Lv Watertown | 12.55AM |
| Lv Columbus | f1.16AM |
| Lv Portage | 1.56AM |
| Lv Sparta | 3.45AM |
| Ar La Crosse | 4.20AM |
| Ar Wabasha | 5.49AM |
| Ar Lake City | 6.05AM |
| Ar St. Paul | 7.30AM |
| Ar Minneapolis | 8.00AM |

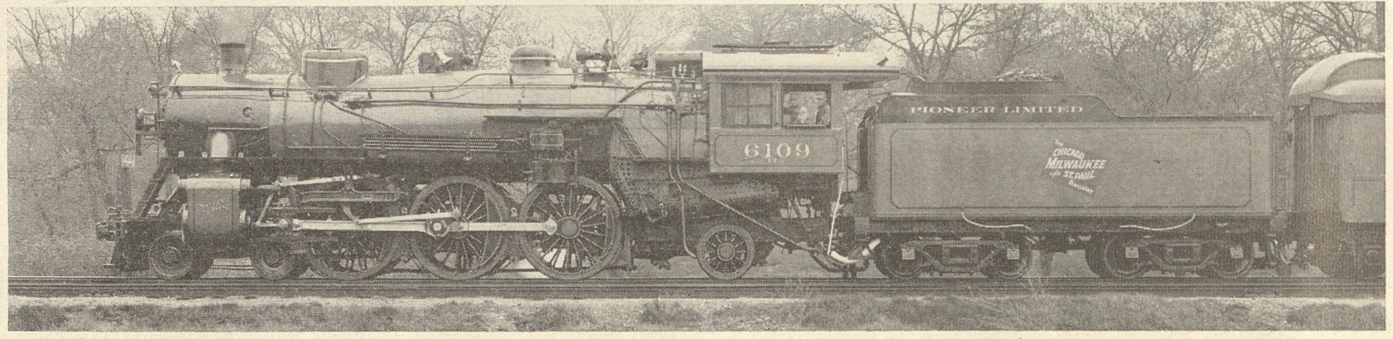
**Note:** *The Pioneer Limited Sleeping cars are ready for occupancy in Chicago, at 9.00 p.m. Cent. Time—Coaches at 9.45 p.m.*

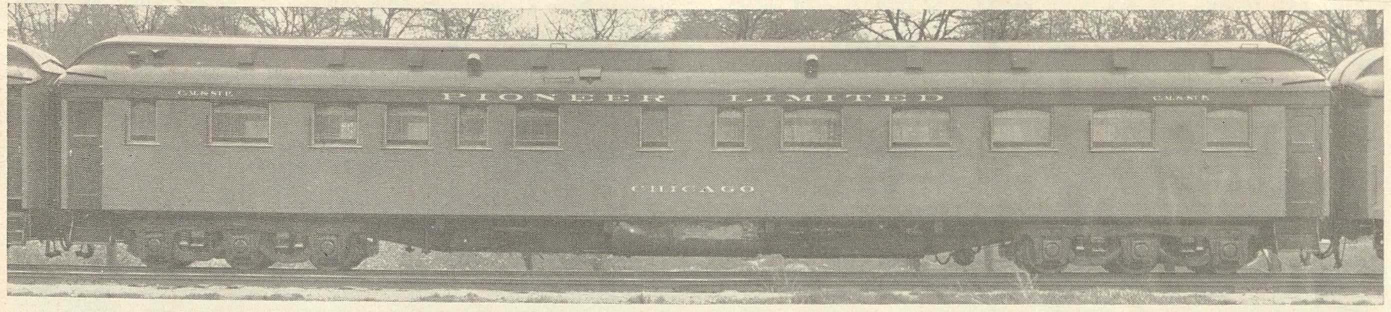
**Cafe Observation Car**
La Crosse to St. Paul-Minneapolis
**Bedroom-Lounge Car**
Chicago to St. Paul-Minneapolis
*6 Single and 2 Double Bedrooms*
**Pullman Standard Sleeping Cars**
Chicago to St. Paul-Minneapolis
*8 Sections-2 Comp'ts-Drawing Room*
*14 Sections.*
☐ Milwaukee to St. Paul-Minneapolis
*10 Sections-Comp't-Drawing Room*
*14 Sections*
**Club Car**
Chicago to St. Paul-Minneapolis
*Valet-Buffet Service—Radio*
**Dining Car Service**
*A la carte and club breakfast*
**Luxury Lounge Coaches**
Chicago to St. Paul-Minneapolis

Amount

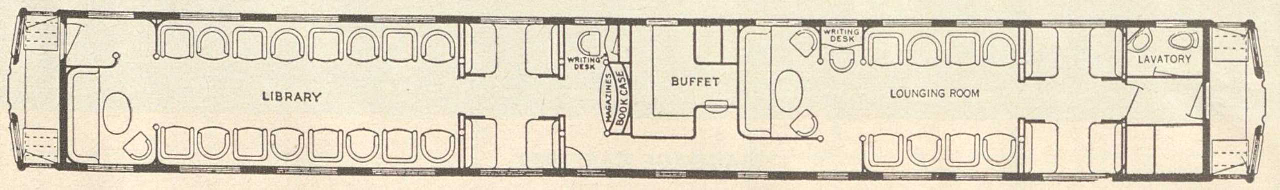
*I THERE are still old-timers in Deerfield who remember the* Pioneer *— during the Golden Age. Twilight of a hot summer day, the cool of the night falling over the peaceful Illinois prairie. The first indication of impending importance was always the click of the depot semaphore arm as it locked into place — straight up — all clear! Next there was the mournful wail from the south — the whistle for County Line Road crossing. No. 1 was on the way. From around the curve at Elm Street came the ear-splitting roar and the pounding of drivers. A flash of golden yellow cars, then quickly off to the north as the red-and-white striped awning valance and the red illuminated drum sign of the observation car disappeared in a swirl of dust. Seconds more and she was a tiny speck off in the distance.*

*Things will not be quite like that again — ever.*

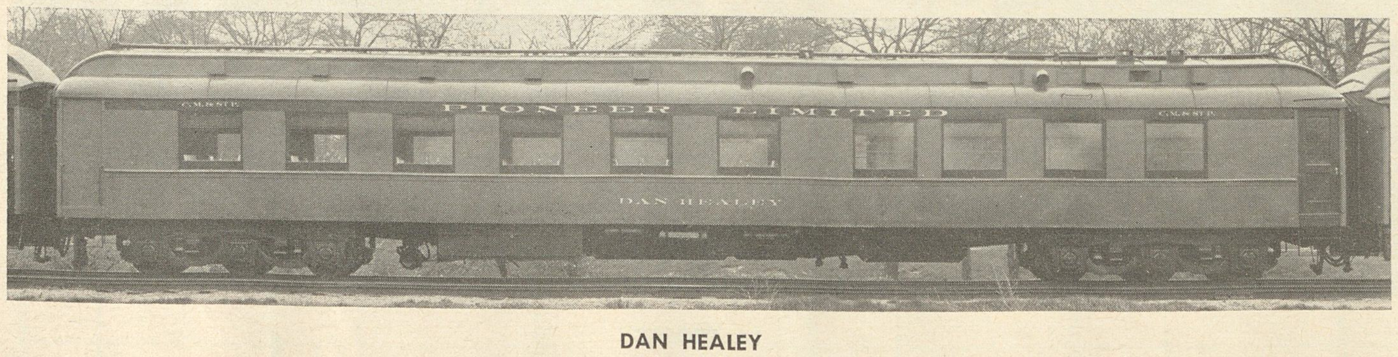

PIONEER LIMITED
6109
CHICAGO MILWAUKEE ST. PAUL


PIONEER LIMITED
CHICAGO

CHICAGO


LIBRARY
WRITING DESK
BUFFET
LOUNGING ROOM
WRITING DESK
LAVATORY

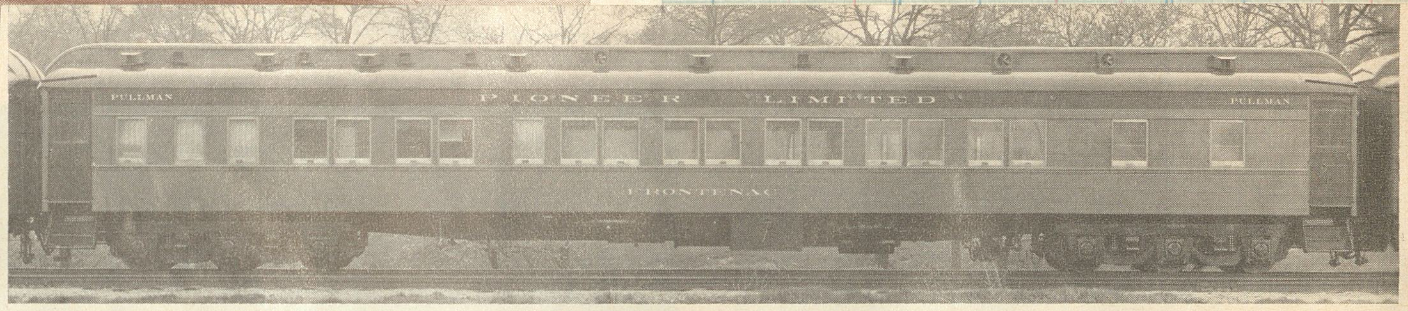
**LIBRARY-CLUB CAR** was built by Barney & Smith in 1909, subsequently refurbished and steel-plated by railroad. It had brown leather chairs for 72, leaded glass windows, sections for card playing, a 32 x 49-inch tapestry, ivory-tinted ceiling, cuspidors.


PIONEER LIMITED
DAN HEALEY

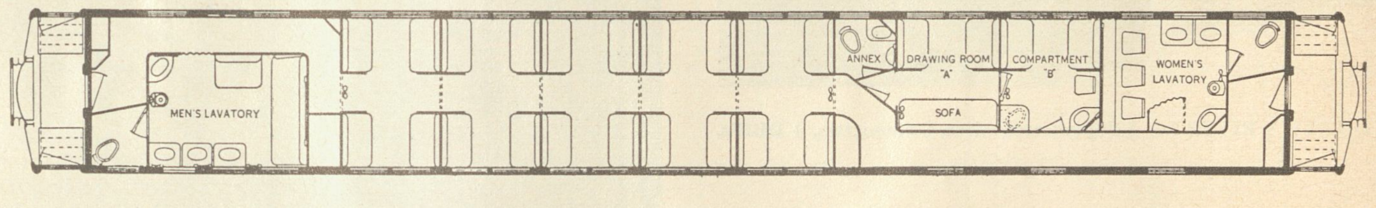
DAN HEALEY

**DINING CAR** was 72 feet long, seated 36, was finished in mahogany, contained first electrical refrigeration in U.S. rail dining service. It was named for Dan Healey, who was the oldest dining car steward in the country at the time of his death in 1922. He'd served nine different presidents of the country, inspired columnist Frances Boardman of the St. Paul Daily News to write: "You probably know Dan Healey. And you doubtless feel confident that Dan Healey knows you. Maybe he does. If he doesn't you'll never know or find it out, for he'll contrive to keep you thinking that he and your father were bosom friends, and that you've inherited his devotion to the family. He'll confirm your belief in this personal attachment by such substantial attentions as a plate of perfect griddle cakes (that you didn't order and won't be asked to pay for) served at the psychological moment when he feels that your breakfast on the Pioneer Limited calls for just that addition. For it's on the Pioneer that Dan Healey practices the art of hospitality and diplomacy." No wonder, therefore, that the employer of the late "Mr. Dan" respectfully named in his honor the dining car of the new Pioneer Limited of 1927. Like the club car, it was operated by the railroad.

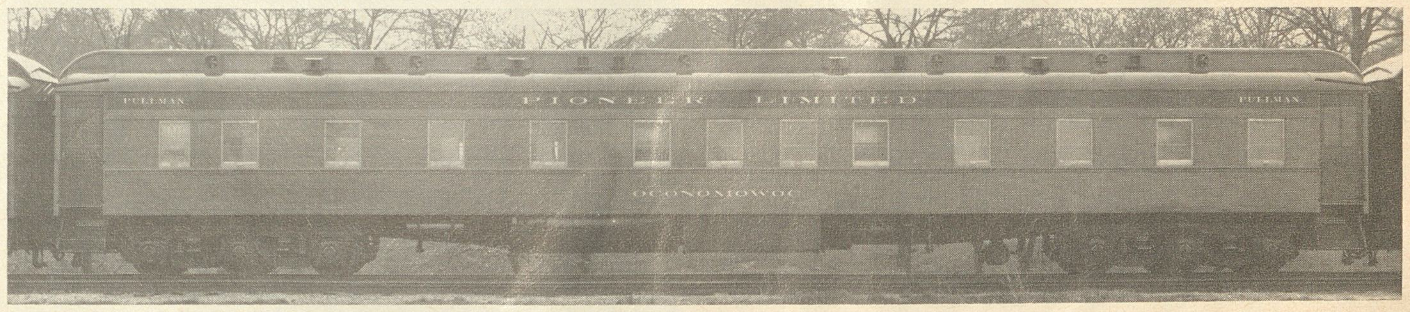
Introduced as Nos 1 & 4 between Chicago and the Twin Cities in 1872.
Named "Pioneer Limited" when re-equipped in 1898 at cost of $250,000


PULLMAN
PIONEER LIMITED
PULLMAN
FRONTENAC

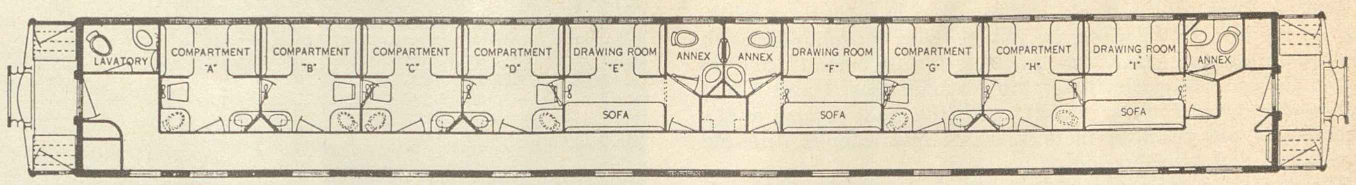
FRONTENAC


MEN'S LAVATORY
ANNEX
DRAWING ROOM
COMPARTMENT
SOFA
WOMEN'S LAVATORY

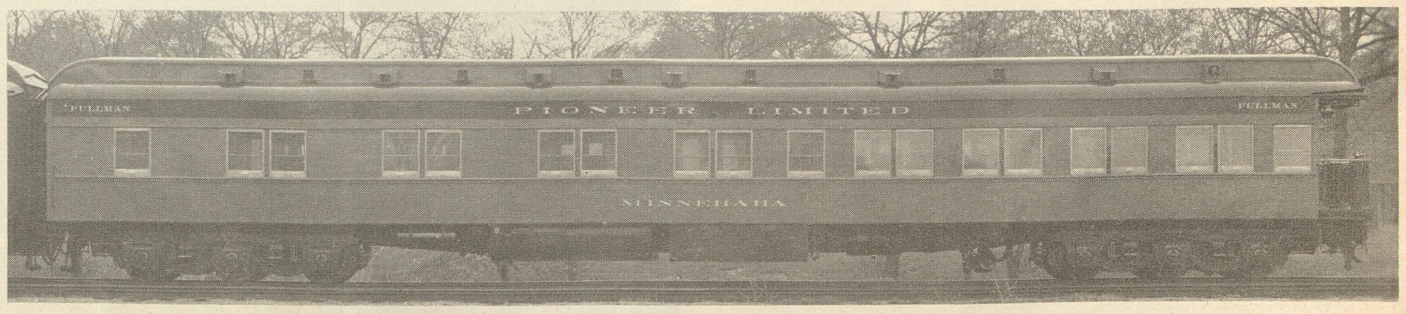
ON each Pioneer there was a 10-section, 1-drawing-room, 1-compartment Pullman operating between Milwaukee and Minneapolis. Frontenac boasted brass window sash, bronze lights, and "fluted pilasters in polychrome and gold with Moorish arches."


PULLMAN
PIONEER LIMITED
PULLMAN
OCONOMOWOC

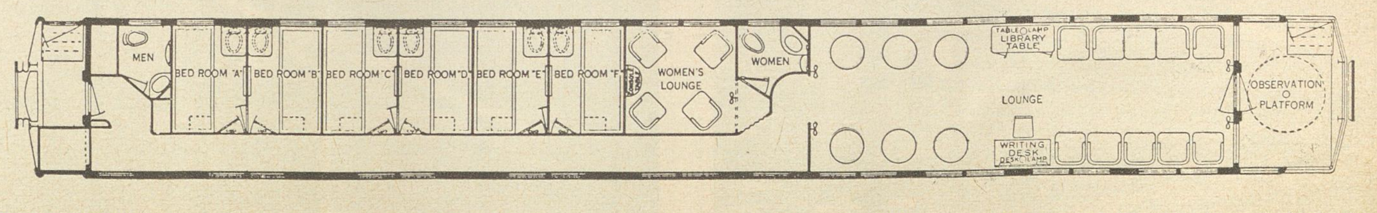
OCONOMOWOC


LAVATORY
COMPARTMENT "A"
COMPARTMENT "B"
COMPARTMENT "C"
COMPARTMENT "D"
DRAWING ROOM "E"
ANNEX
ANNEX
DRAWING ROOM "F"
COMPARTMENT "G"
COMPARTMENT "H"
DRAWING ROOM "I"
ANNEX
SOFA
SOFA
SOFA

THERE was one 6-compartment, 3-drawing-room Pullman on each train (the other was named Okauchee) and the road termed the type one "so much appreciated by families, and parties of friends." Each room had a clock, electric fan, door knocker.

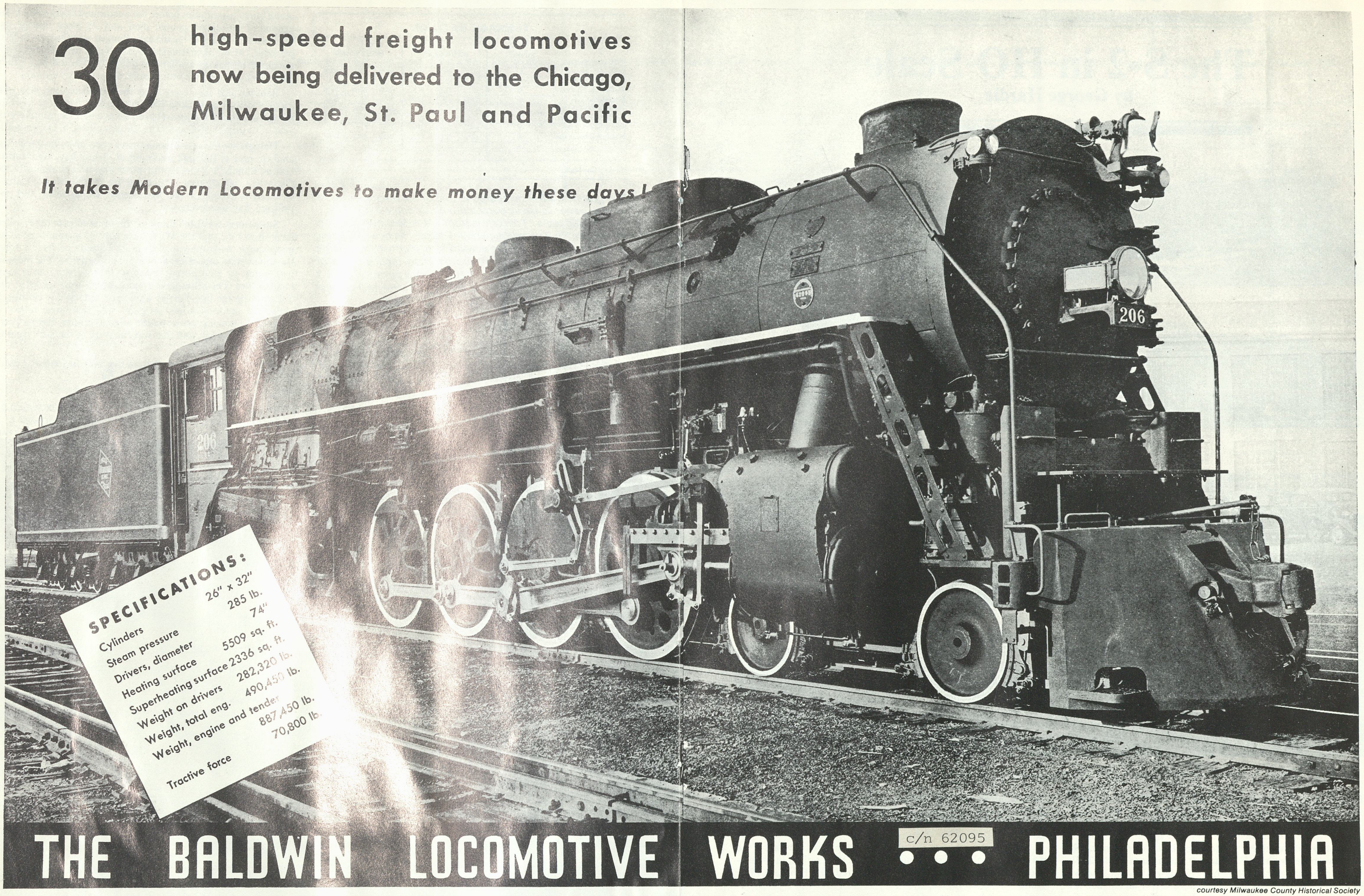

PULLMAN
PIONEER LIMITED
PULLMAN
MINNEHAHA

MINNEHAHA


MEN
BED ROOM "A"
BED ROOM "B"
BED ROOM "C"
BED ROOM "D"
BED ROOM "E"
BED ROOM "F"
WOMEN'S LOUNGE
WOMEN
TABLE LAMP LIBRARY TABLE
LOUNGE
WRITING DESK DESK LAMP
OBSERVATION PLATFORM

**"REAL BEDS"** were a feature of the 6-single-bedroom observation lounges that trailed each Pioneer. "Each room is designed for occupancy by one person and contains a single bed almost 6½ feet long — a real bed with deep box spring, thick comfortable mattress, and a silk spread." So read the brochure, which described such bedrooms as "an amazing novelty for overnight travel." There were 140 miles of Mississippi River to be seen from lounge. Or the hardy could set up a camp chair on the platform.

50



# 30 high-speed freight locomotives now being delivered to the Chicago, Milwaukee, St. Paul and Pacific

*It takes Modern Locomotives to make money these days!*

**SPECIFICATIONS:**

| | |
|---|---|
| Cylinders | 26" x 32" |
| Steam pressure | 285 lb. |
| Drivers, diameter | 74" |
| Heating surface | 5509 sq. ft. |
| Superheating surface | 2336 sq. ft. |
| Weight on drivers | 282,320 lb. |
| Weight, total eng. | 490,450 lb. |
| Weight, engine and tender | 887,450 lb. |
| Tractive force | 70,800 lb. |

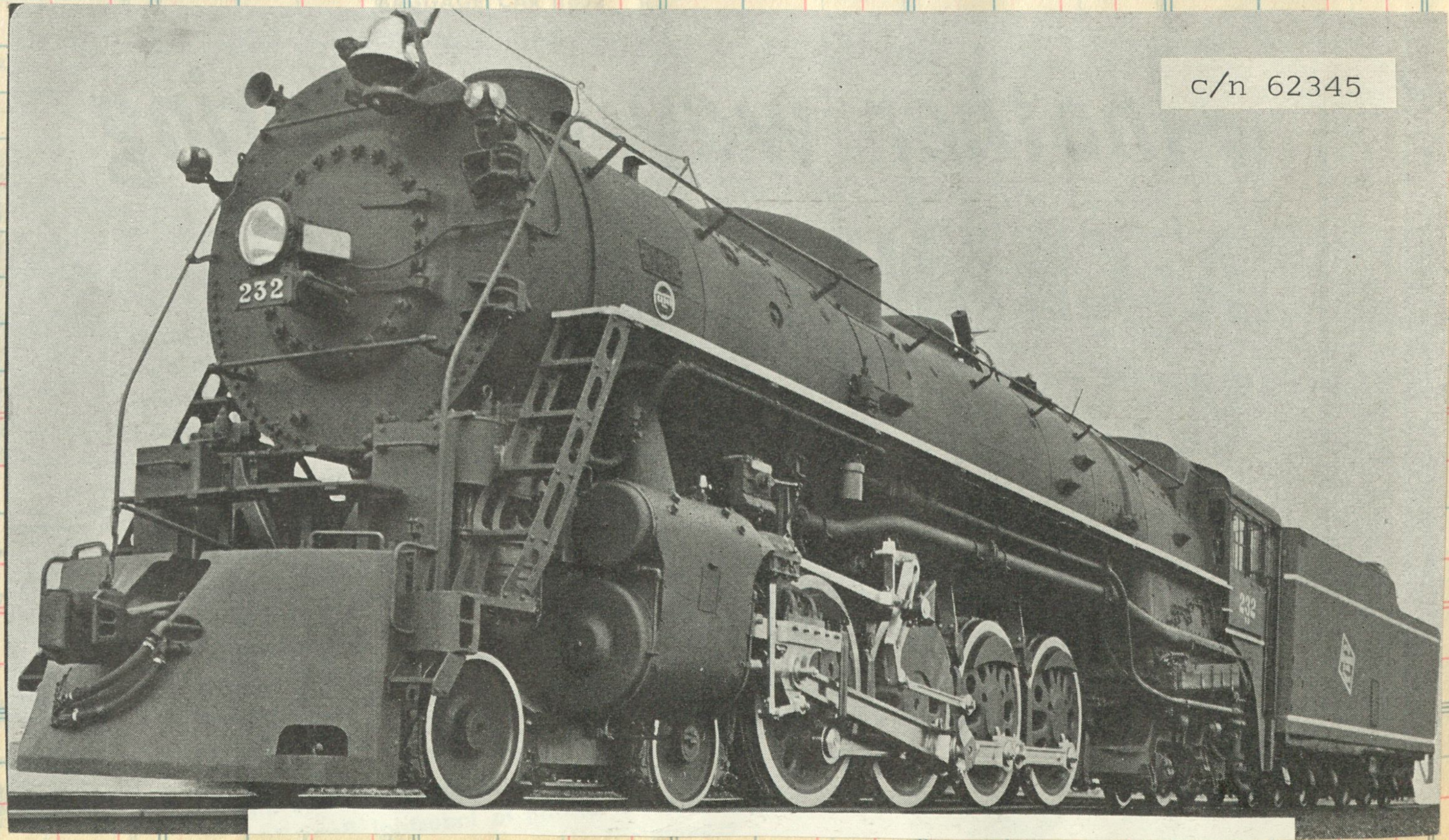
## THE BALDWIN LOCOMOTIVE WORKS • • • PHILADELPHIA

c/n 62095

courtesy Milwaukee County Historical Society

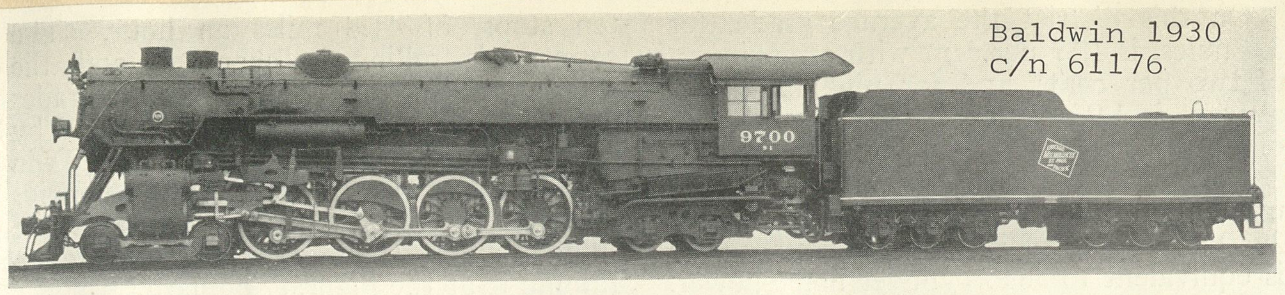
*The Baldwin Locomotive Works was justifiably proud of the 30 class S-2's that they produced for the Milwaukee Road and featured them in a two page ad. This one appeared in the January, 1938 issue of Milwaukee Magazine. The locomotives proved so successful that the railroad ordered an additional 10, the last of which was completed in May, 1940.*

**Milwaukee Extra 222 West, advance section of the regular coast time freight #263, with a consist of machinery and armament material for the shipyards of Washington. The engine is Class S-1 4-8-4 Type. This picture was taken west of Portage, Wisconsin. Courtesy of the Milwaukee Road.**



c/n 62345

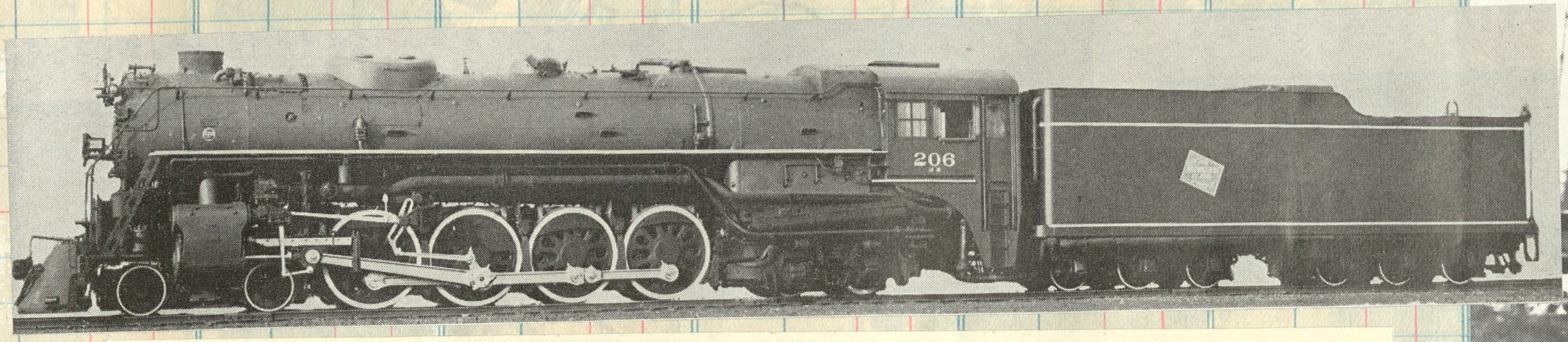
Clos. No. Sold Amount



Baldwin 1930
c/n 61176

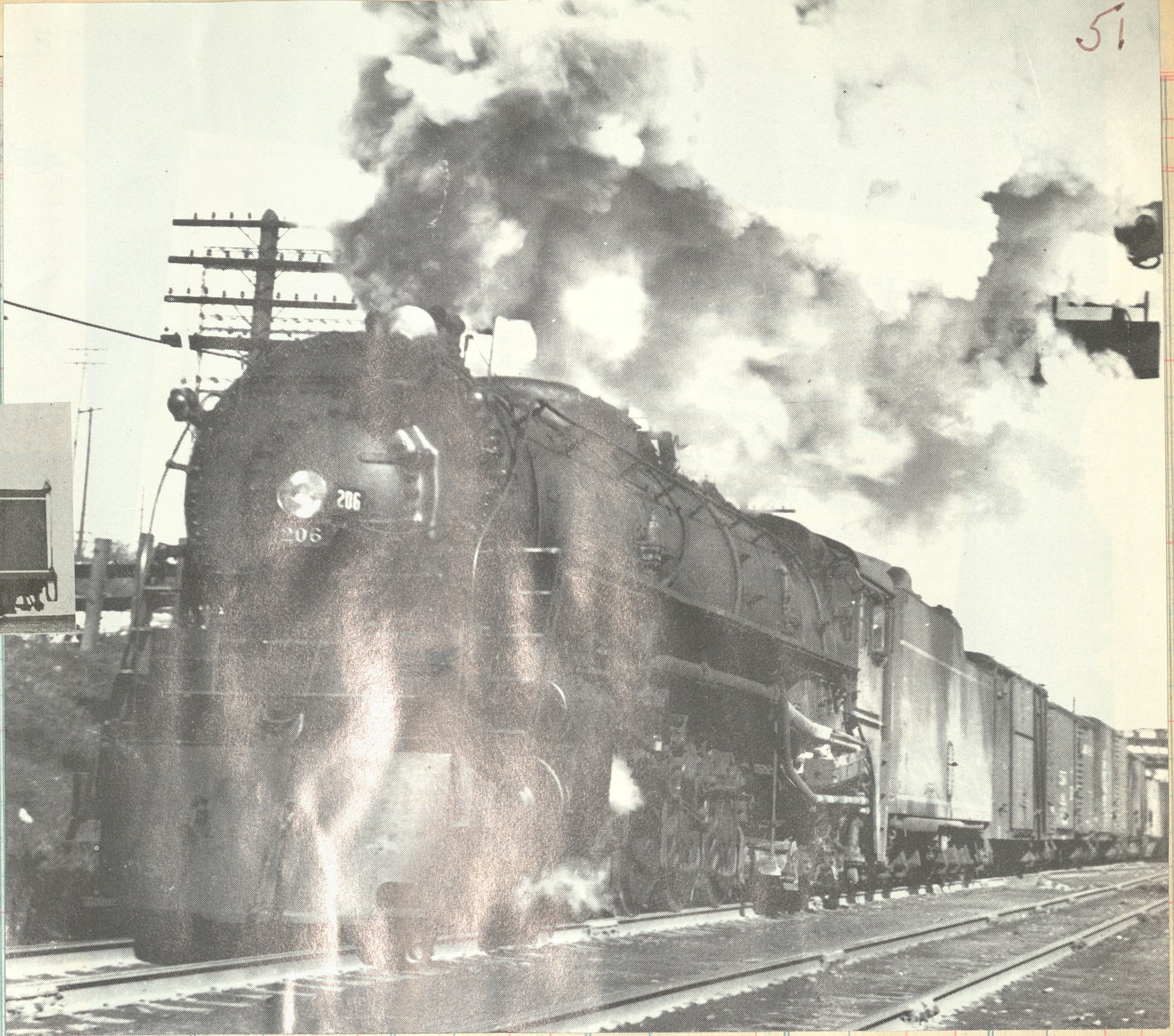
4-8-4 Type Locomotive, Class S-1, Chicago, Milwaukee, St. Paul & Pacific Railroad

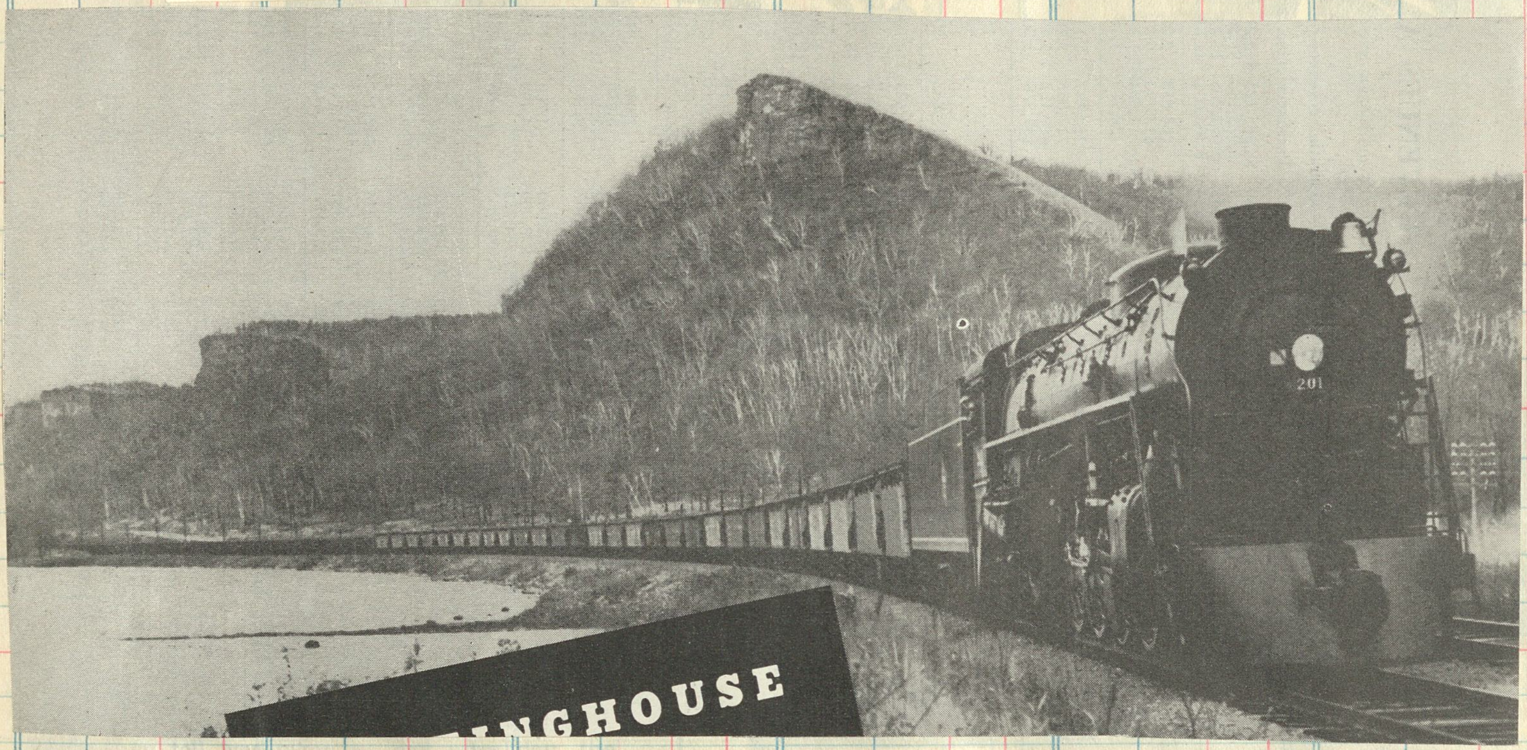
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 28″ x 30″ | Tubes, number | 3½″, 218; 2¼″, 56 | Wheel base, driving | 19′ 9″ | Weight, total engine | 450,840 lb. |
| Drivers, diam. | 74″ | " length | 21′ 0″ | " " total engine | 46′ 3″ | " " " and tender | 740,000 lb. |
| Boiler, diam. | 88″ | Grate area | 103 sq. ft. | " " " " and tender | 88′ 4½″ | Tank capacity | 15,000 U. S. gal. |
| Steam pressure | 230 lb. | Water heating surface | 5400 sq. ft. | Weight on drivers | 258,810 lb. | Fuel " | 20 tons |
| Firebox | 137″ x 108¼″ | Superheating surface | 2403 sq. ft. | | | Tractive force | 60,000 lb. |
| Tubes, diam. | 3½″ & 2¼″ | | | | | | |

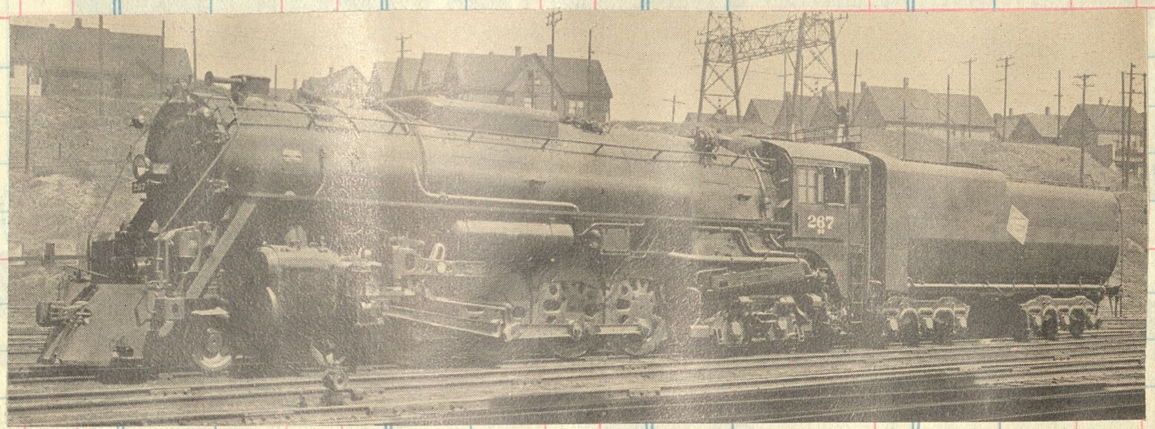


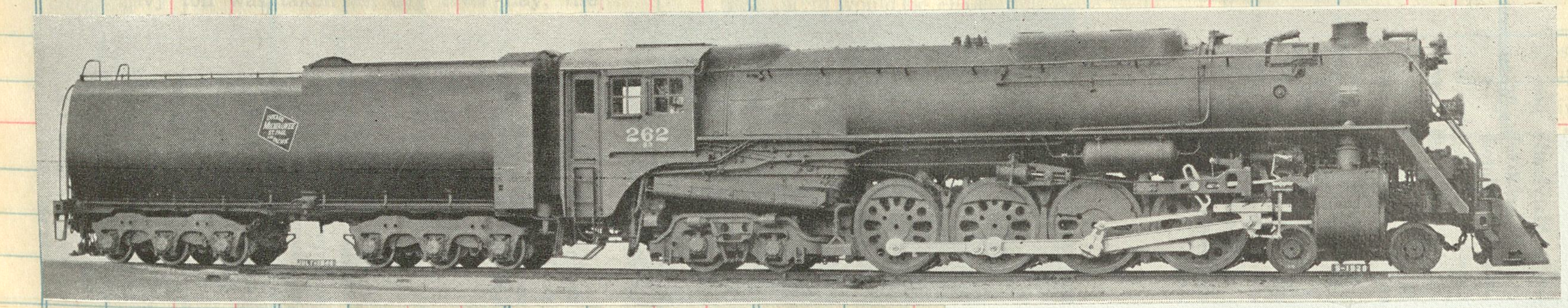
The class S-2 engines built by Baldwin were delivered in three groups:- 200-218 in 1937, 219-229 in 1938, 231-240 in 1940..

At right the 206 charges thru Merrill Park, Milwaukee with a westbound extra



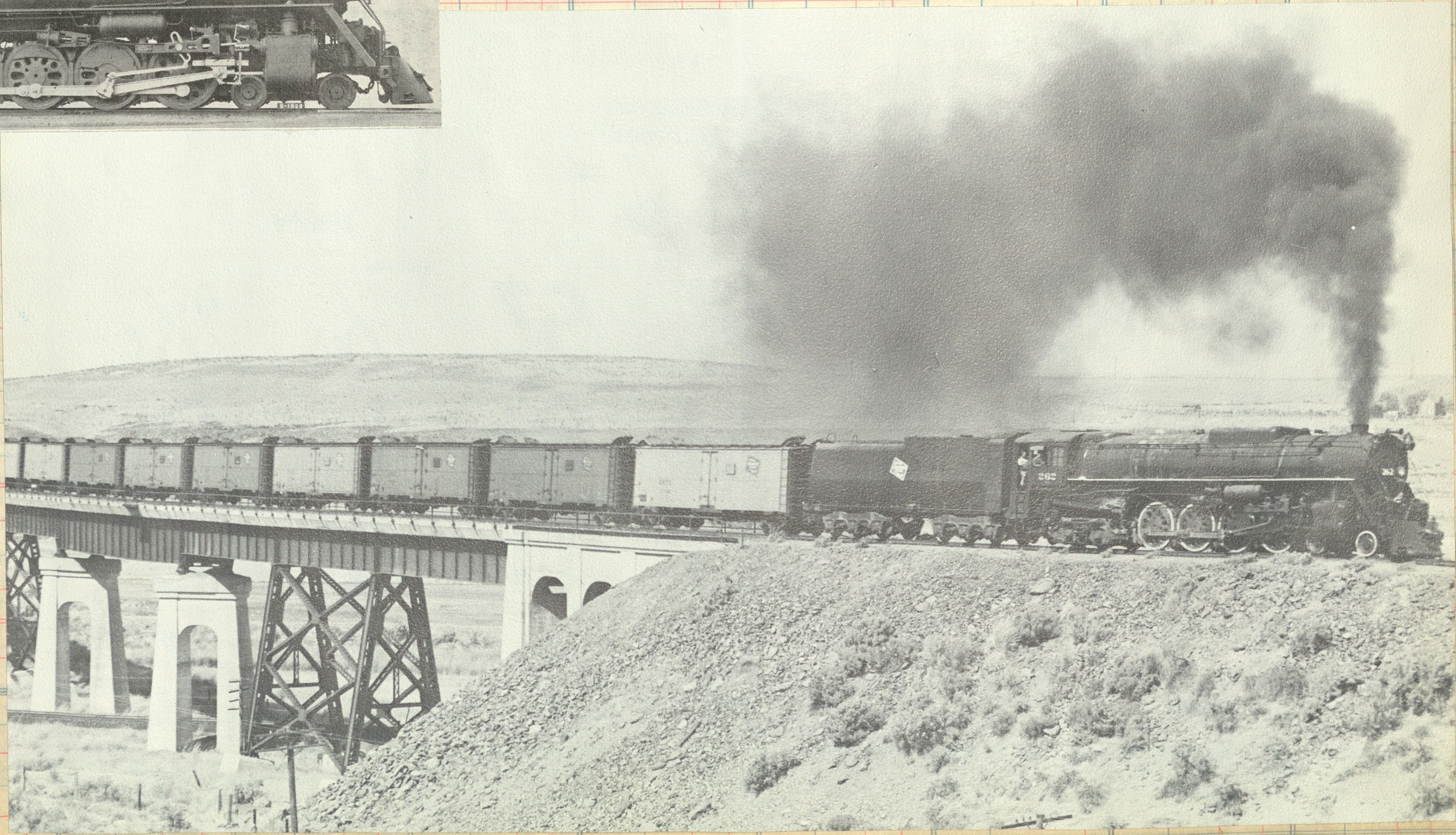




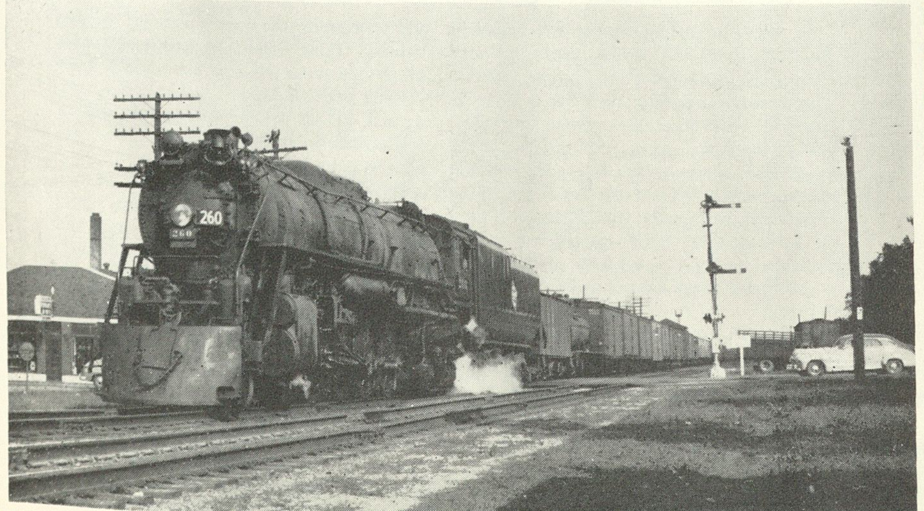


The S-3 class constructed by Schenectady in 1944 Noed 260-269. Four were converted to oil burners; 262, 263, 267, 269; and assigned to the Idaho Div. The S-3's were the last engines built for the Milwaukee Road.

At right-one of the oil burners, #262, heads east with a reefer block crossing over the N. P. at Lind, Wash.



In September 1950 when steam, if not dominant, was very much in evidence on Midwestern main lines, Milwaukee Road S-3 number 260, an impressive 4-8-4, was caught entering the Illinois Division main line at Bensenville, Ill.



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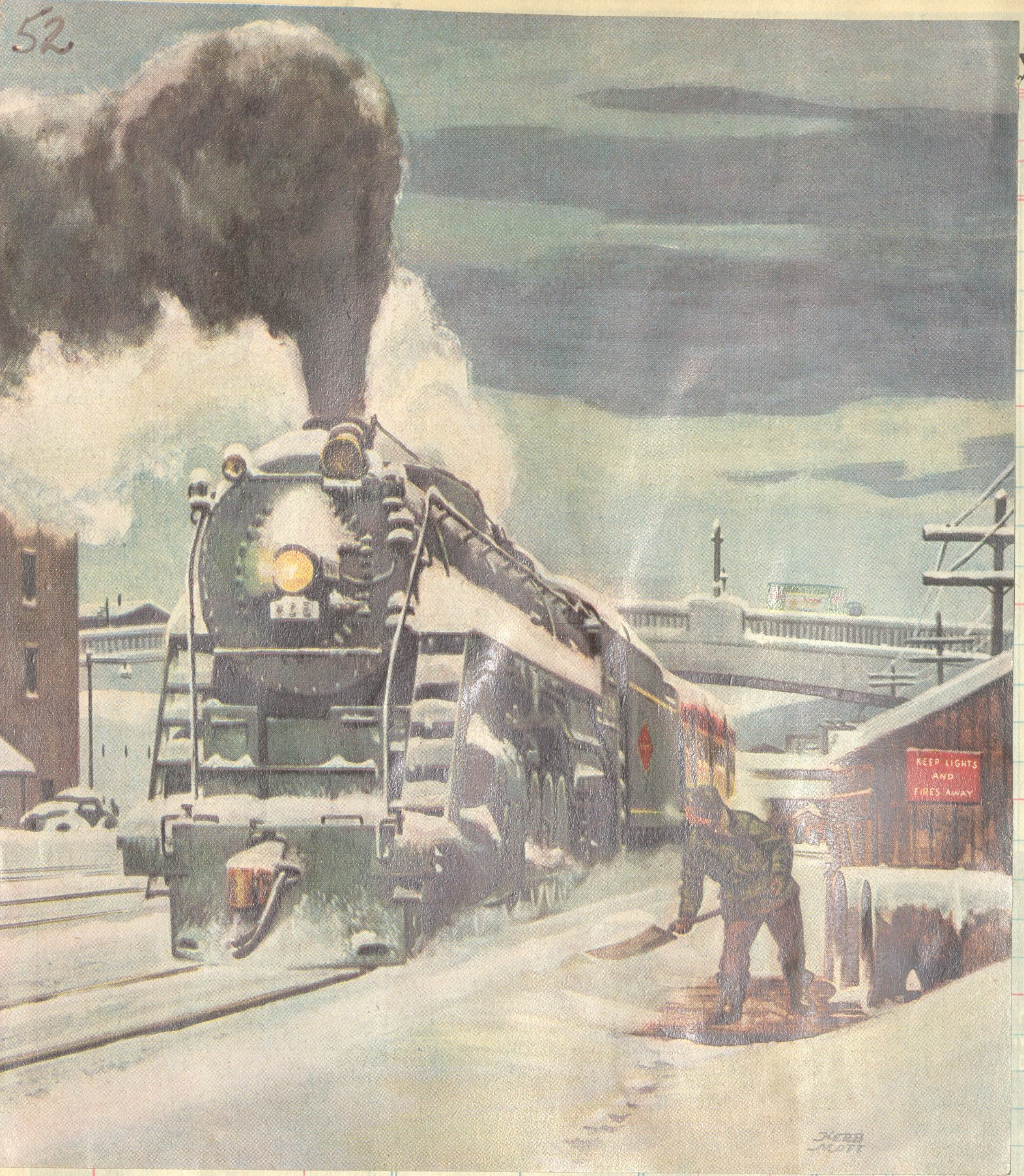
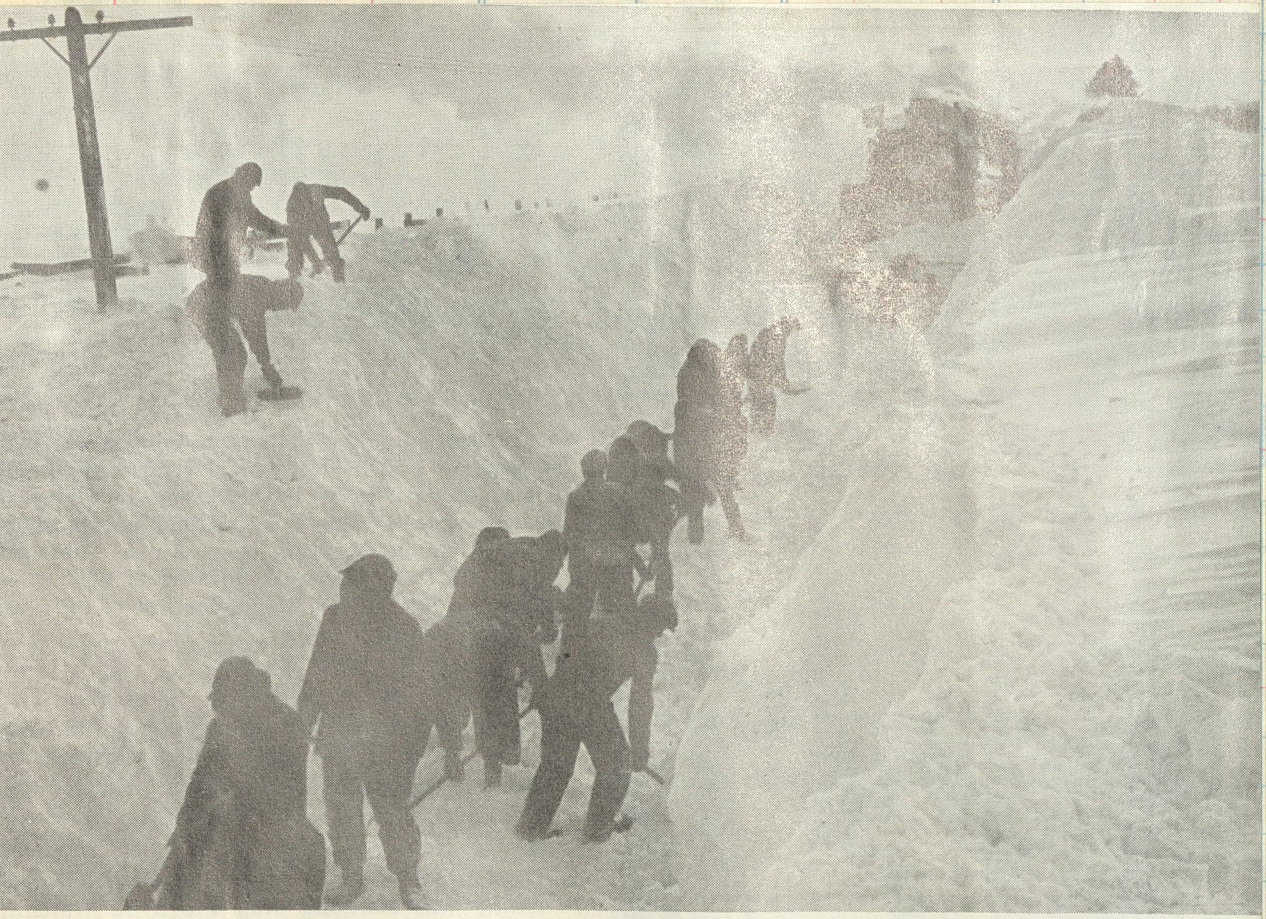
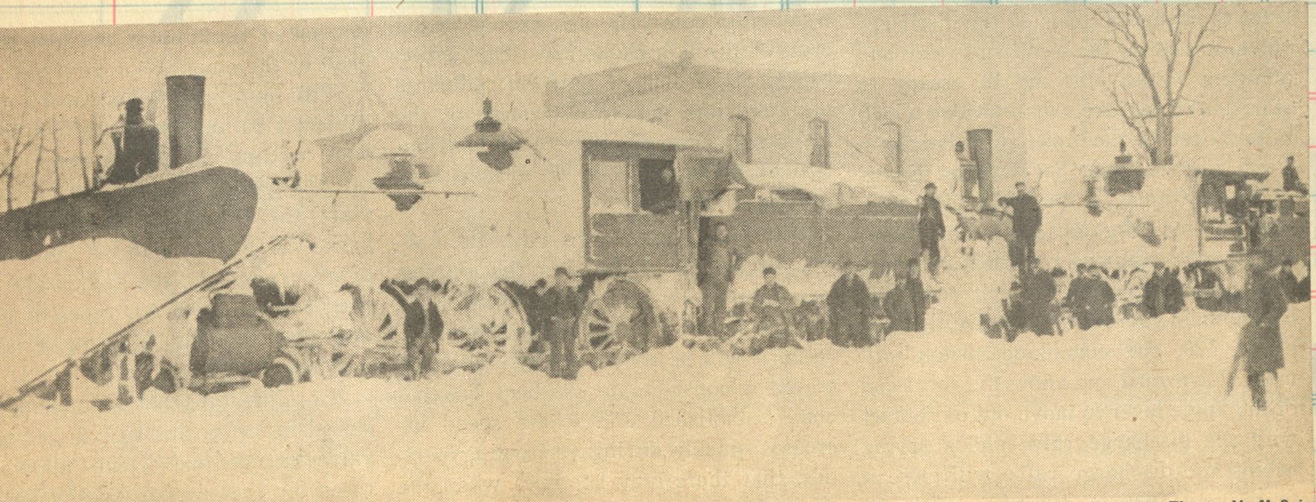

KEEP LIGHTS AND FIRES AWAY
HERB MOTT



J. Valentine collection.

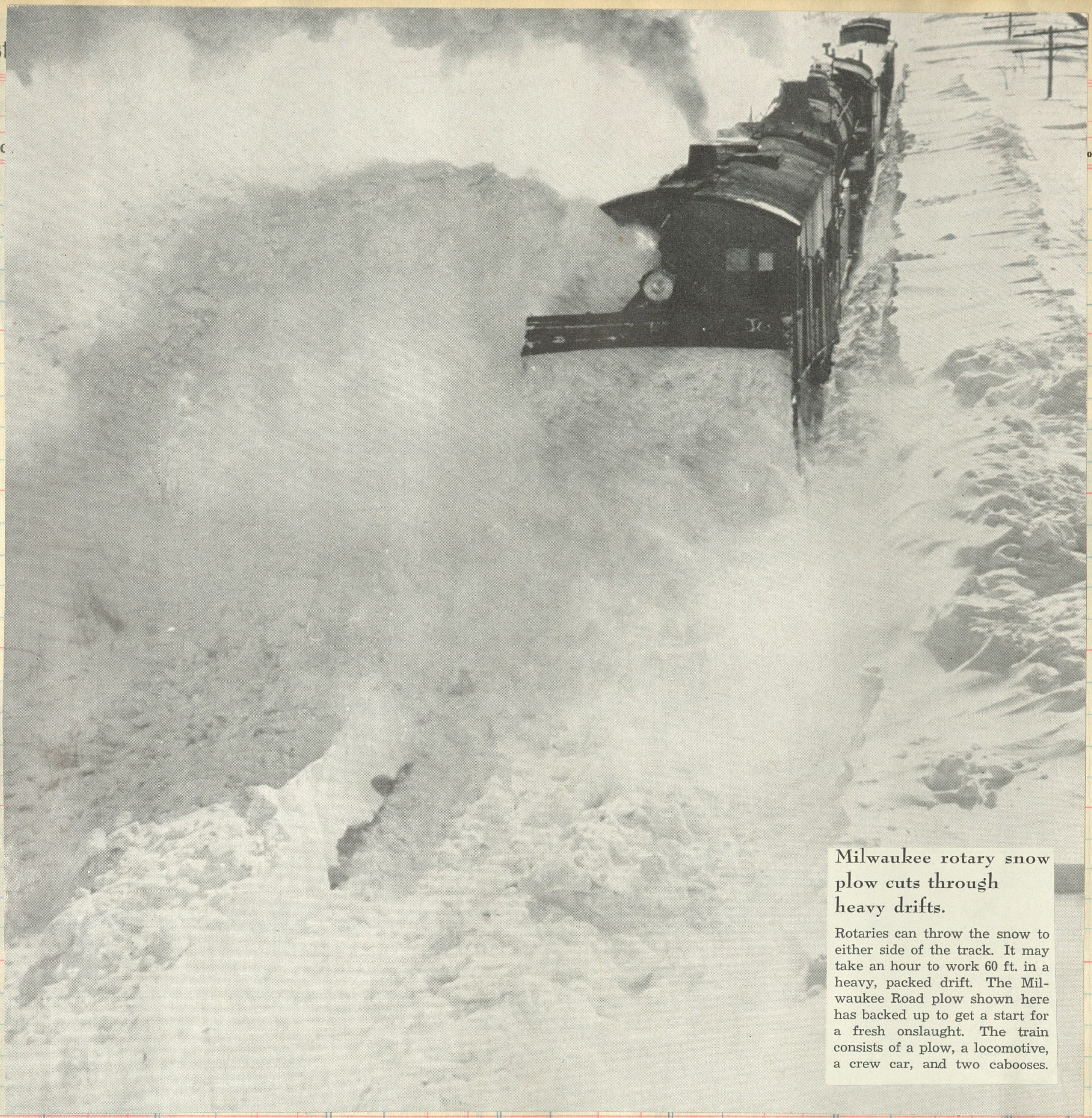
unday, February 16, 1936, and the thermometer reads 16 below. The engine is waiting for the track to e cleared so it can pull out a cut of freight cars from a stalled freight ahead.



Thomas V. McGuire

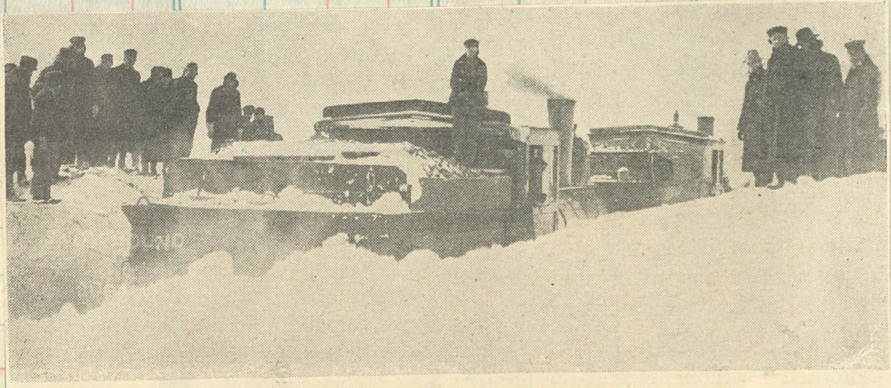
WINTER RAILROADING IN WISCONSIN 42 YEARS AGO

es 763 and 787 of the Chicago, Milwaukee & St. Paul Railroad, Racine and Southwestern Division, shown at Union Grove, Wis., with the now plow. Photograph was taken in February, 1898. Engineer on the head engine is Brother John Biddle, and Brother Thomas Cummisford, Div. 66, on the second.



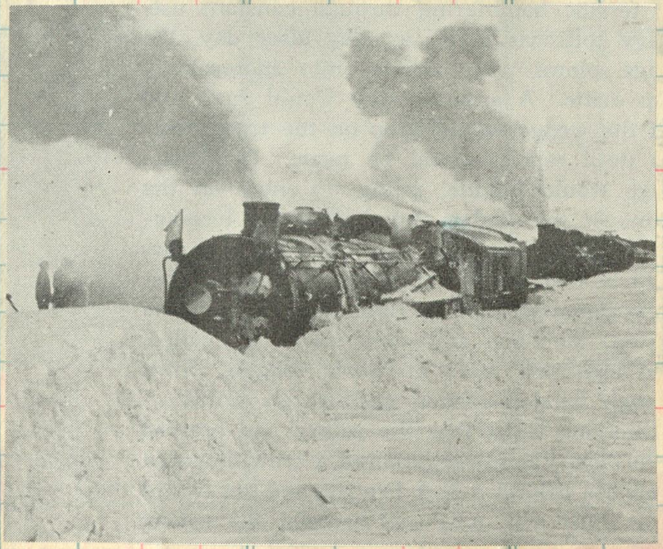
**Milwaukee rotary snow plow cuts through heavy drifts.**

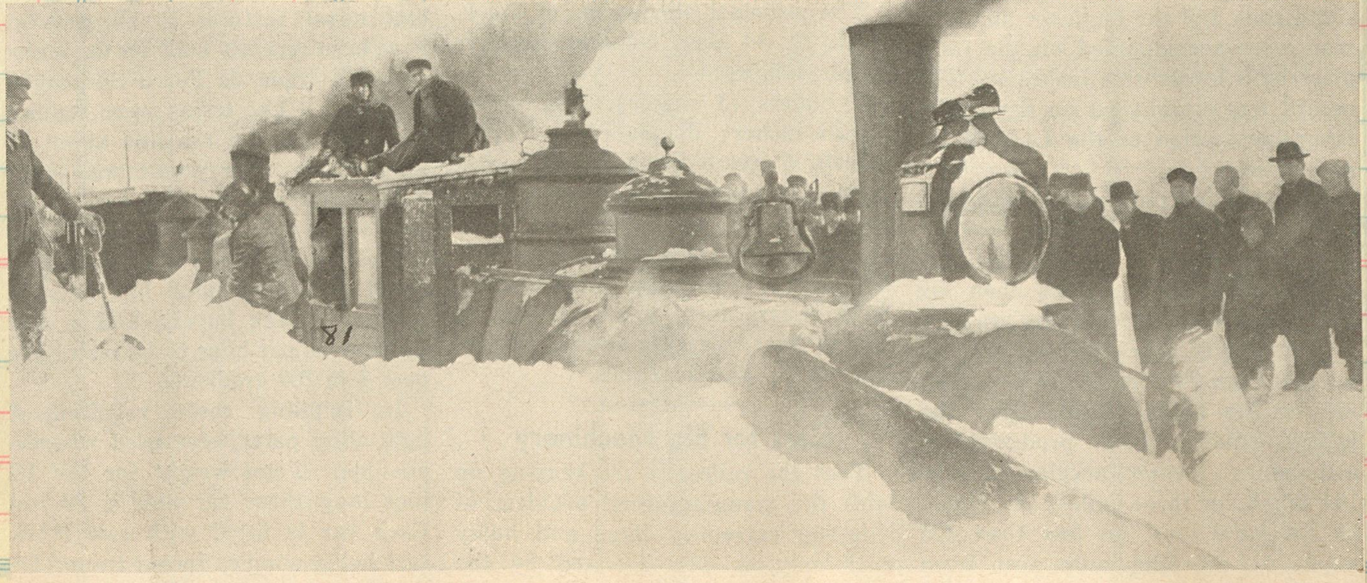
Rotaries can throw the snow to either side of the track. It may take an hour to work 60 ft. in a heavy, packed drift. The Milwaukee Road plow shown here has backed up to get a start for a fresh onslaught. The train consists of a plow, a locomotive, a crew car, and two cabooses.



IN 16 FEET OF SNOW

On the leading engine, 81, of the Milwaukee Railroad, was J. J. Barels, who reported that the snow was 16 feet deep near Scotland, S. D., in 1909. Photograph submitted by Brother I. J. Clark, Div. 490.





IN 16 FEET OF SNOW

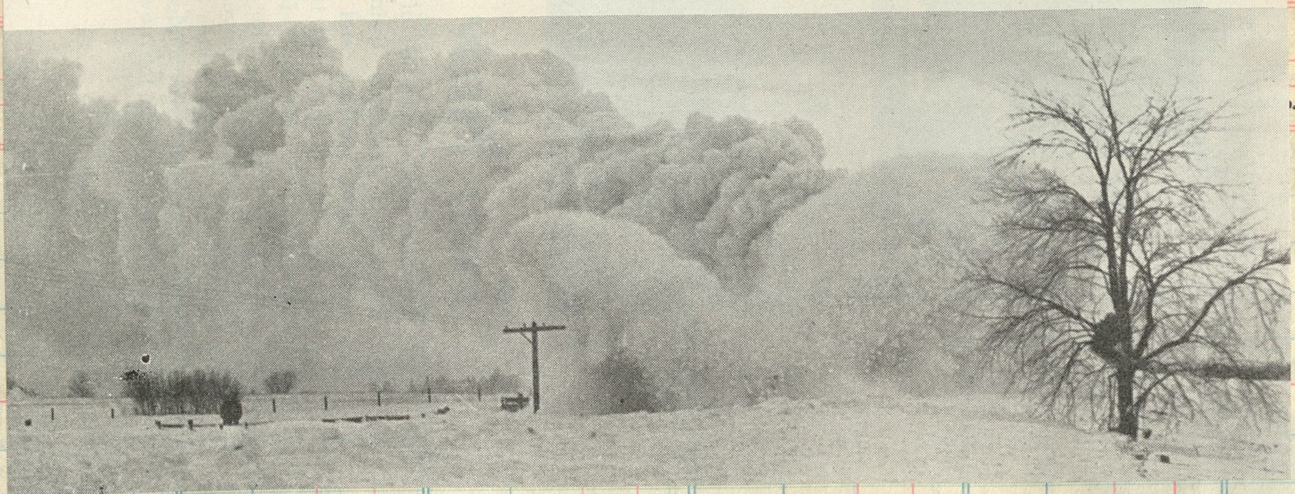
ocomotive 81 of the Chicago, Milwaukee, St. Paul & Pacific Railroad at Scotland, S. D., February 10, 1909, J. J. Barels, engineer.

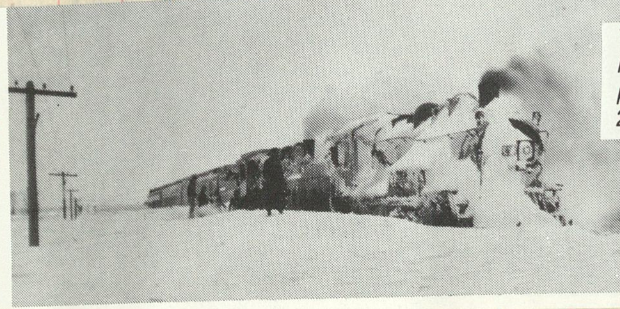
Clas. No.

mount

West of Ripon, on the Milwaukee Road Oshkosh line, a wedge plow blasts into a four-foot snowdrift. Snow is thrown 25 feet into the air when the plow crashes the drift at 20 miles per hour.

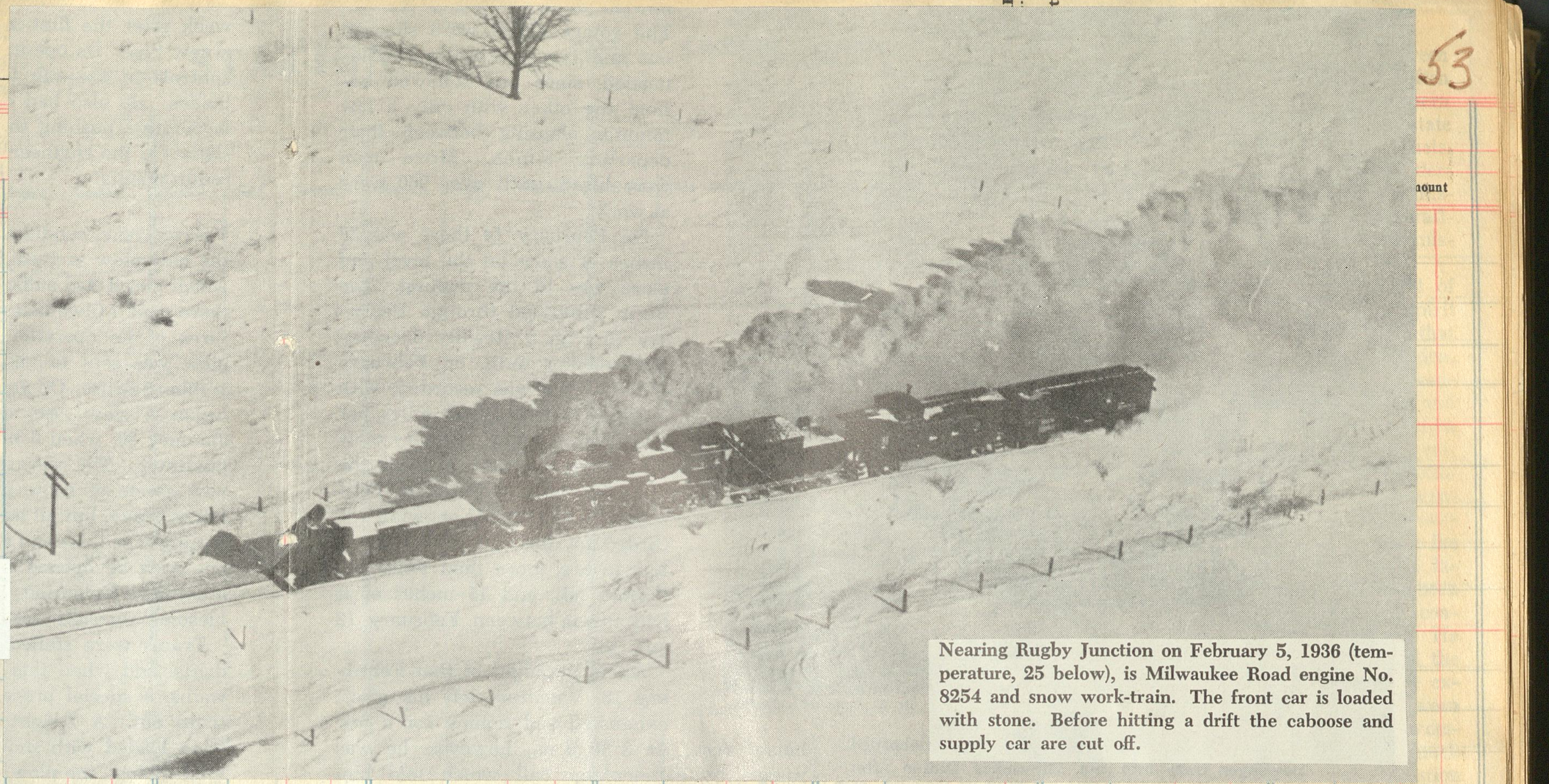
J. Valentine collection.





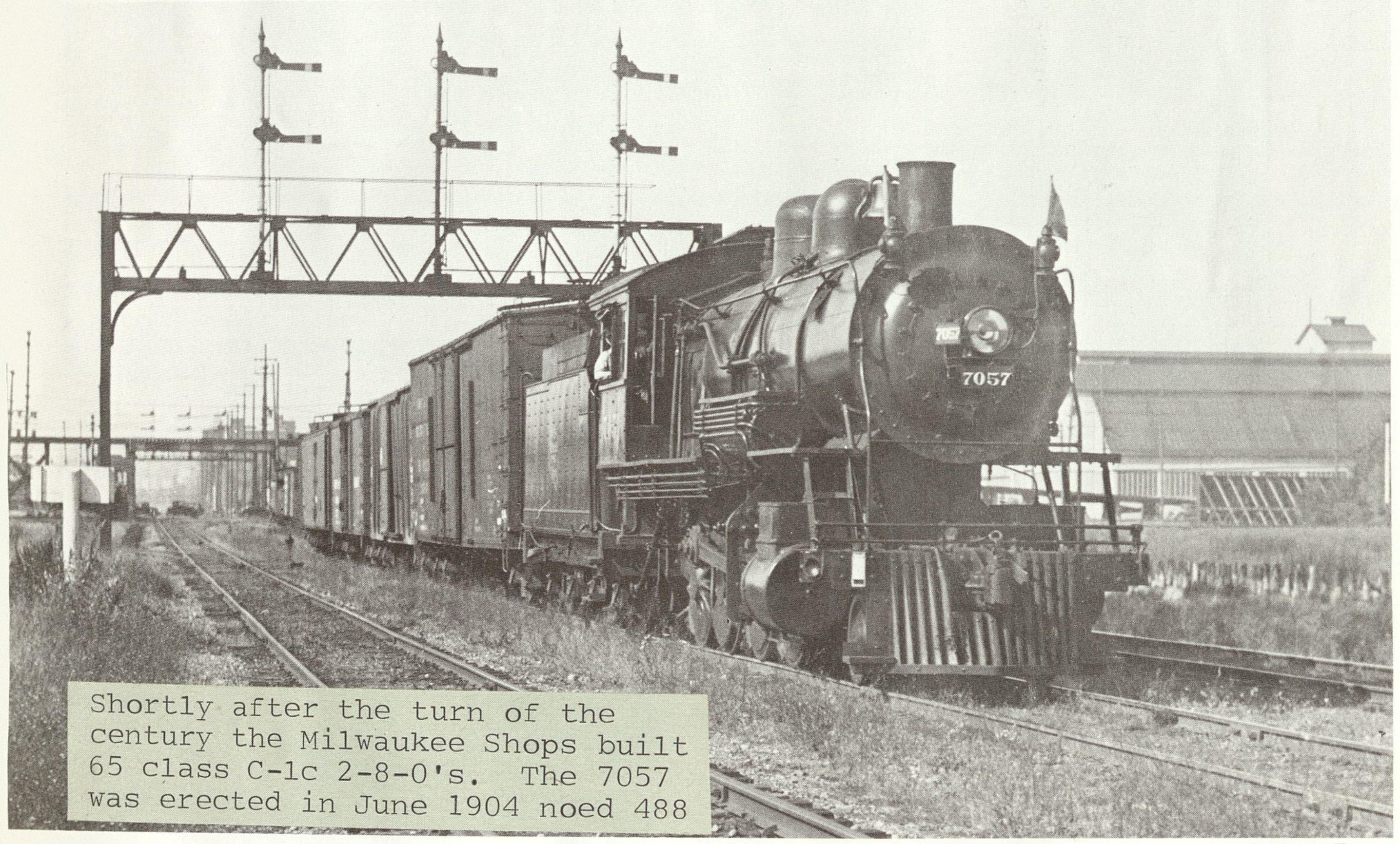
*Tough winters and lots of drifting snow were not uncommon in southern Minnesota, however the winter of 1935-36 was particularly severe. No. 222 was snowbound at Jackson for 25 hours on February 26-27, 1936.*

Jim Sucha Collection



Nearing Rugby Junction on February 5, 1936 (temperature, 25 below), is Milwaukee Road engine No. 8254 and snow work-train. The front car is loaded with stone. Before hitting a drift the caboose and supply car are cut off.

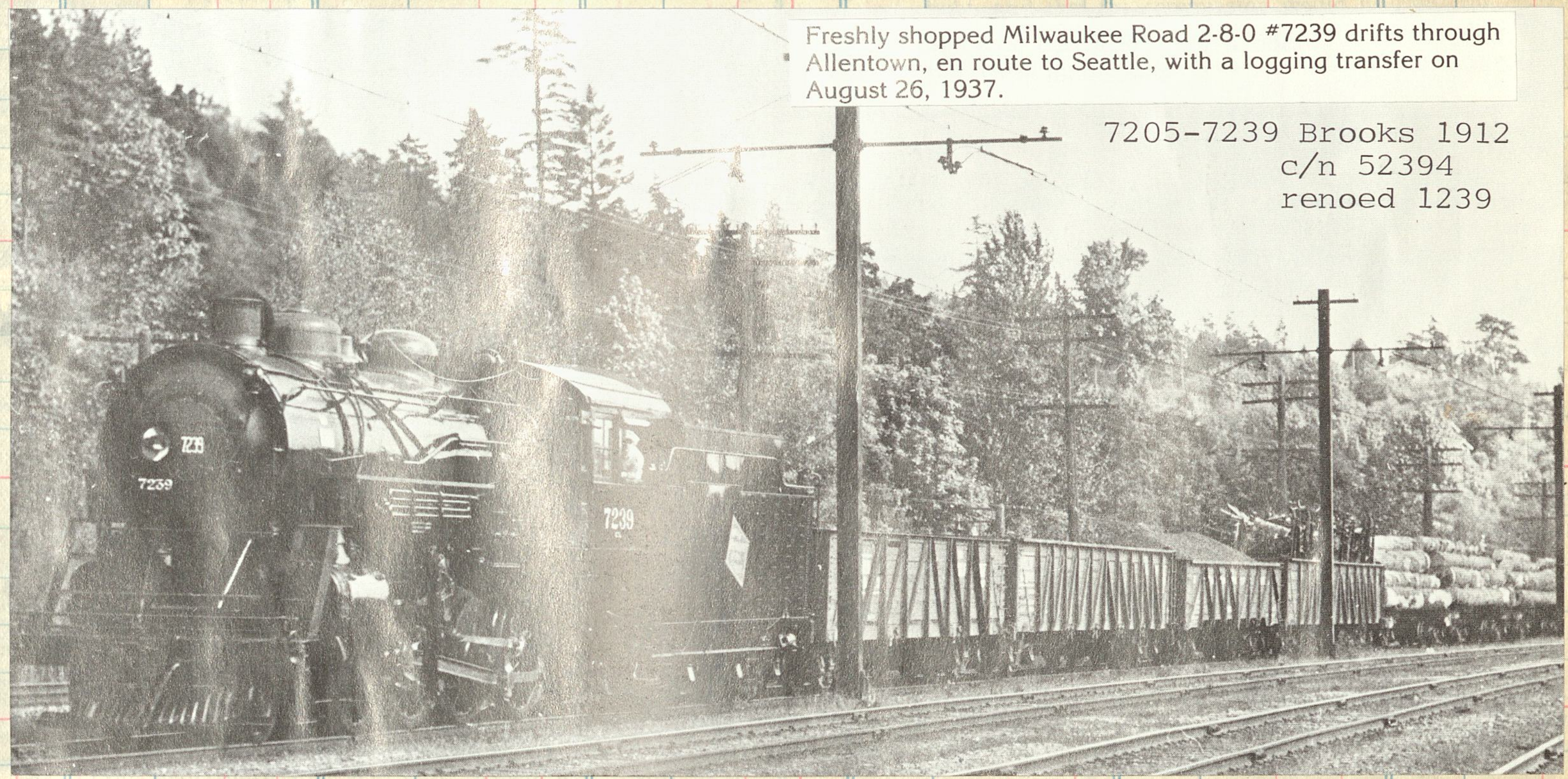
CMStP&P #7057 just south of Spokane Street, Seattle in the mid-30's.



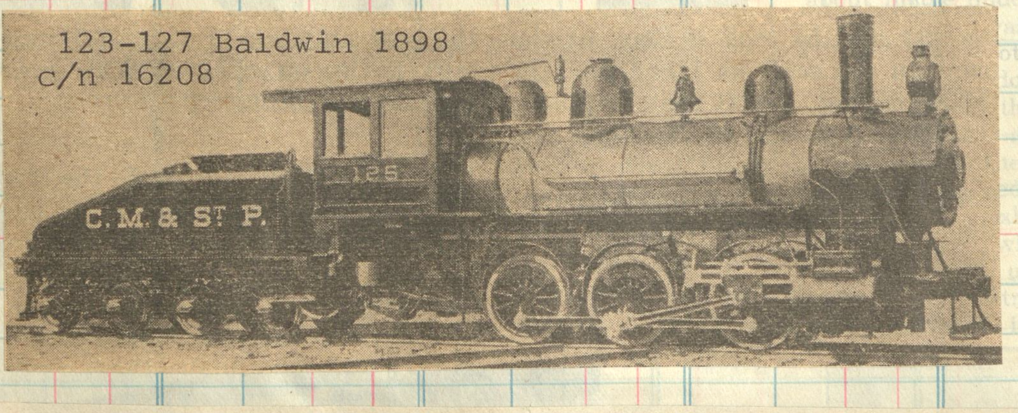
Shortly after the turn of the century the Milwaukee Shops built 65 class C-1c 2-8-0's. The 7057 was erected in June 1904 noed 488

James A. Turner

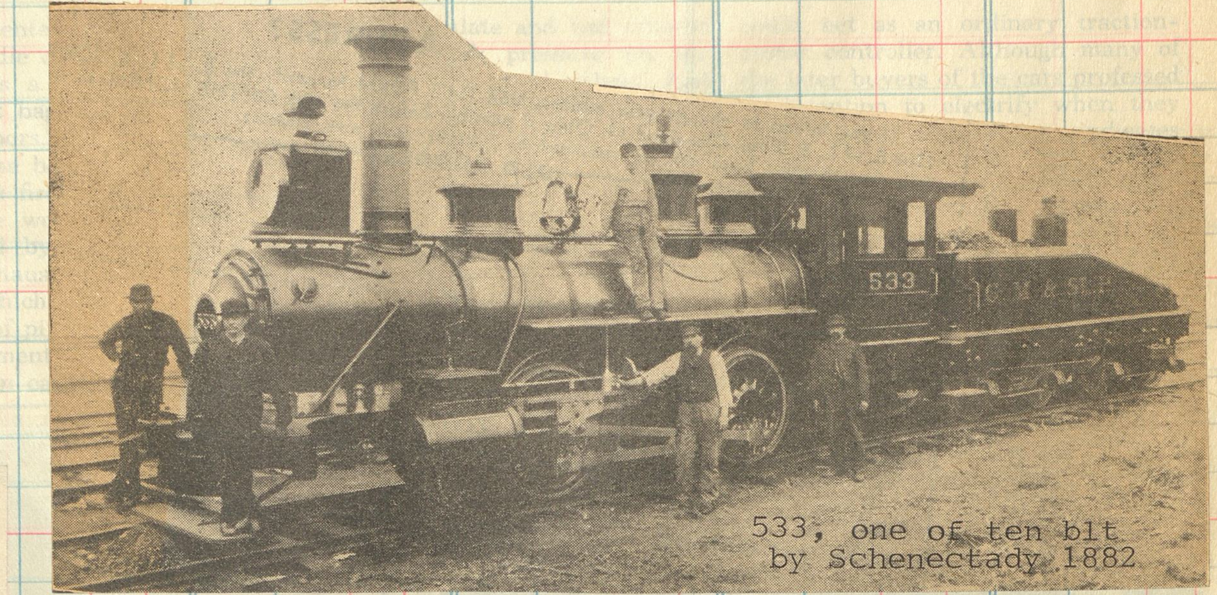
Freshly shopped Milwaukee Road 2-8-0 #7239 drifts through Allentown, en route to Seattle, with a logging transfer on August 26, 1937.



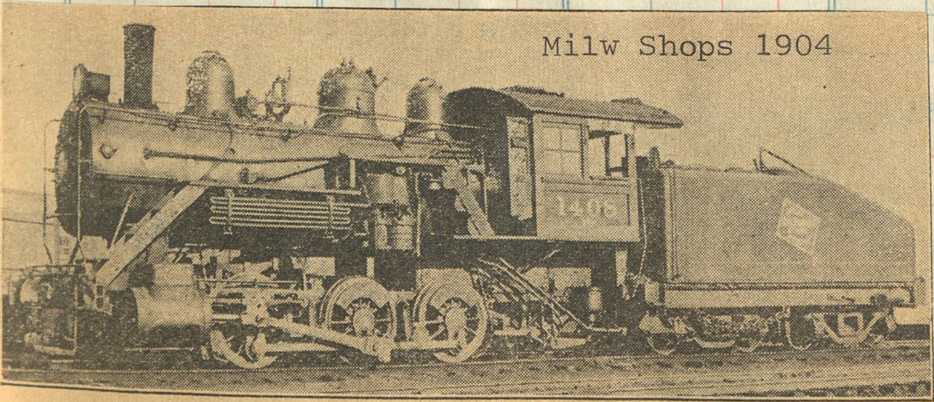
7205-7239 Brooks 1912
c/n 52394
renoed 1239



123-127 Baldwin 1898
c/n 16208

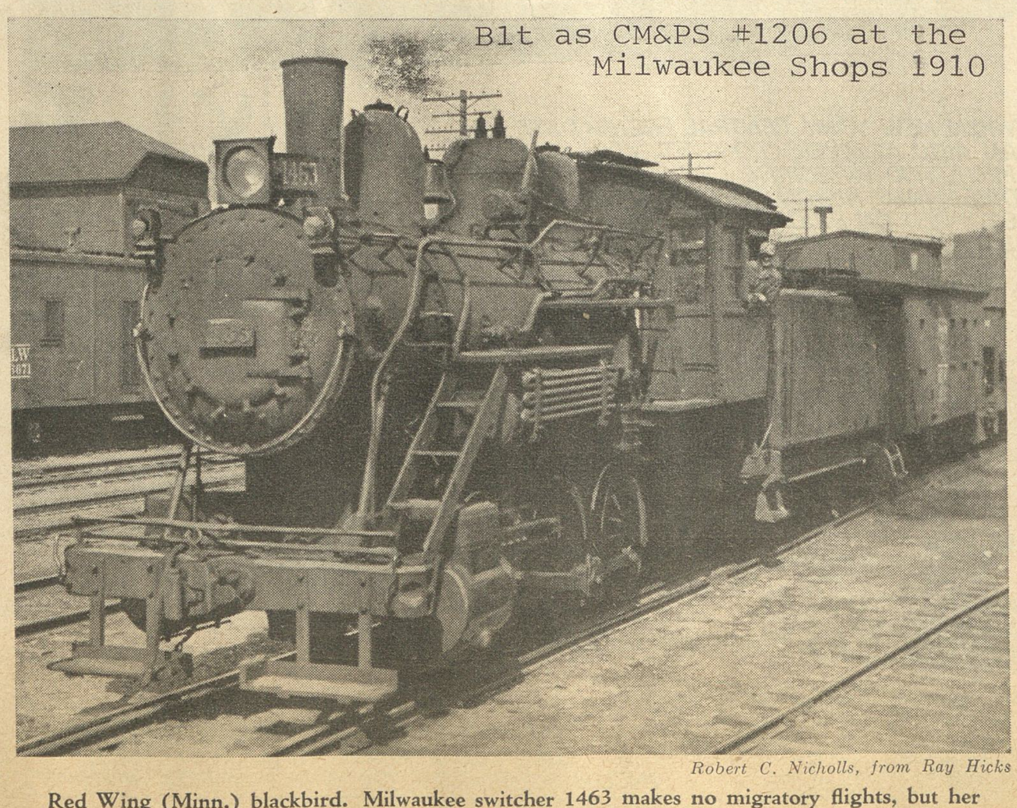


533, one of ten blt by Schenectady 1882



Milw Shops 1904

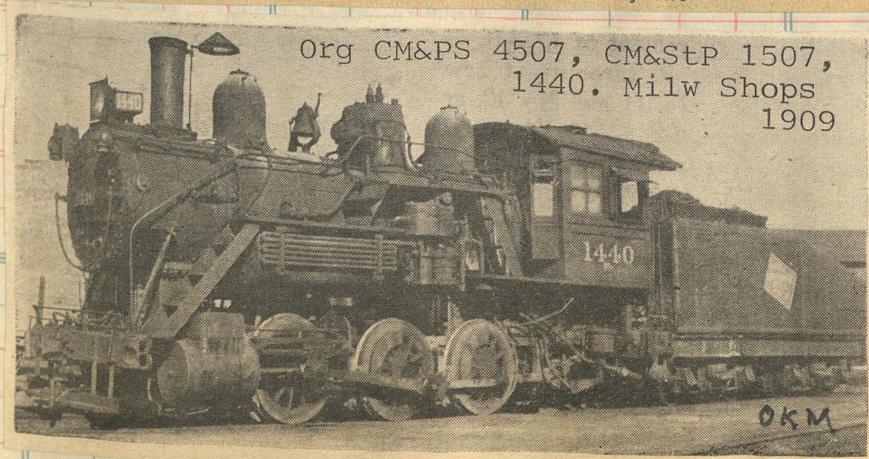
Six-wheeled Switcher Number 1408 Was Formerly 1179



Blt as CM&PS #1206 at the Milwaukee Shops 1910

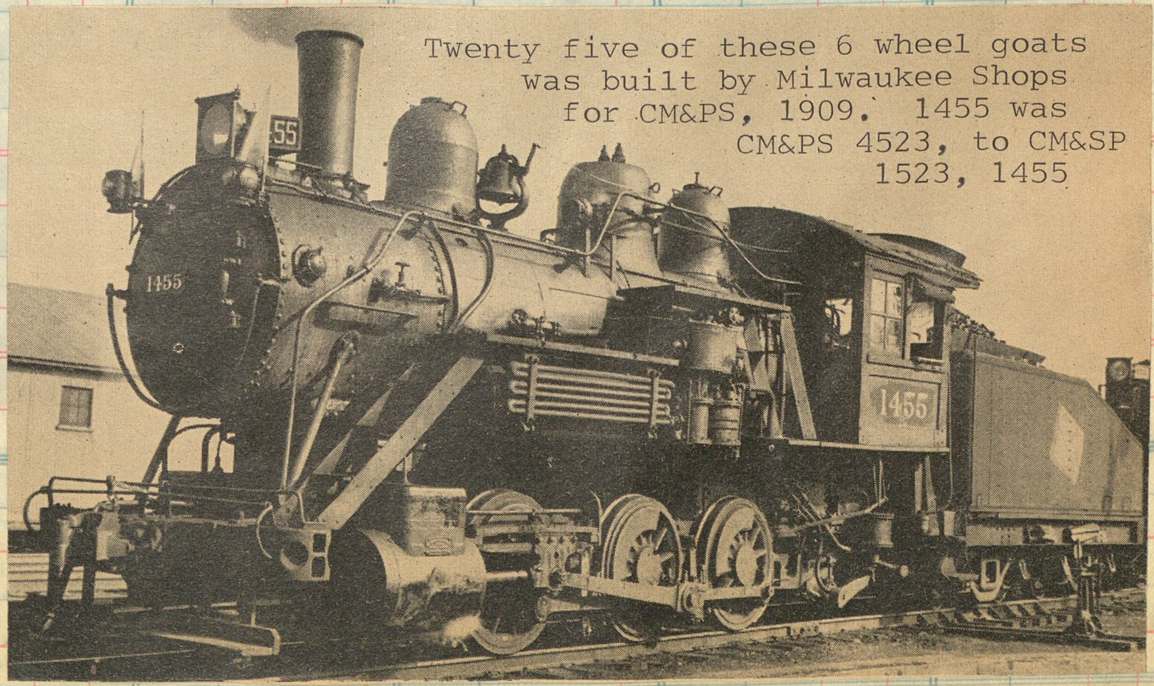
Robert C. Nicholls, from Ray Hicks

Red Wing (Minn.) blackbird. Milwaukee switcher 1463 makes no migratory flights, but her 51-inch wheels have spun off plenty of mileage since 1910



Org CM&PS 4507, CM&StP 1507, 1440. Milw Shops 1909

OKM



Twenty five of these 6 wheel goats was built by Milwaukee Shops for CM&PS, 1909. 1455 was CM&PS 4523, to CM&SP 1523, 1455

Railway Age March 20, 1920

## ew Reclamation Campaign Instituted on the St. Paul

H. S. SACKETT, assistant purchasing agent of the Chicago, Milwaukee & St. Paul, is the author of a new plan being put into effect on the lines of that road, means of which it is hoped to place reclamation work on nore satisfactory, efficient and economical basis. Mr. kett's plan comprises briefly the creation of a system lamation committee at the road's general headquarters and establishment of subordinate committees, composed large- of general and division officers, at each of the road's prin- al shops. The subordinate committees, aided by educa- nal posters such as the one accompanying this article, are supervise local reclamation work, assist in the conduct of cational reclamation campaigns and make studies of the lamation of various groups of materials.

Mr. Sackett's plan is now being put into operation on the

# SAVE MATERIAL $

## DO YOU REALIZE

| | | | |
|---|---|---|---|
| ack spike costs . . . . | $0.03 | A brake shoe costs . . . . | $0.75 |
| dinary 1-inch nut costs . | .04 | An engine oiler costs . . . | .75 |
| ack bolt costs . . . . . | .06 | A track shovel costs. . . . | 1.00 |
| plate costs . . . . . . | .21 | A lantern costs . . . . . . | 1.05 |

An air brake hose costs . $2.35

## DOES IT ASTONISH YOU

TO LEARN THAT THE

## icago, Milwaukee & St. Paul R.R.

SPENT LAST YEAR FOR

| | | | |
|---|---|---|---|
| ck spikes . . | $107,400 | Tie plates . . . . | $306,273 |
| s . . . . . . | 108,036 | Brake shoes . . . | 92,213 |
| ck bolts . . . | 67,496 | Air brake hose . . | 97,020 |

***Over Three Quarters of a Million Dollars for Only Six Items***

# ON'T WASTE MATERIAL

**Many of the European nations are already back on a 10 and even 12 hour s of labor.**

**We must economize and make every step count, if we are to hold our ership in the world.**

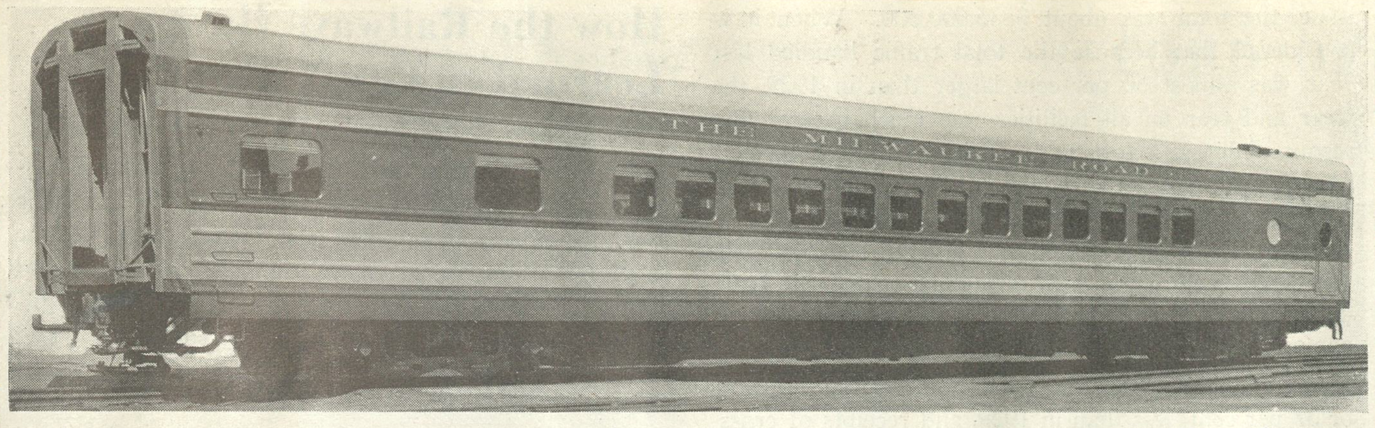
**Let's not lag behind. Let's keep "America" up in front and let's make the waukee" the best operated railroad on earth. All of us together can do it.**

# SAVE MATERIAL $

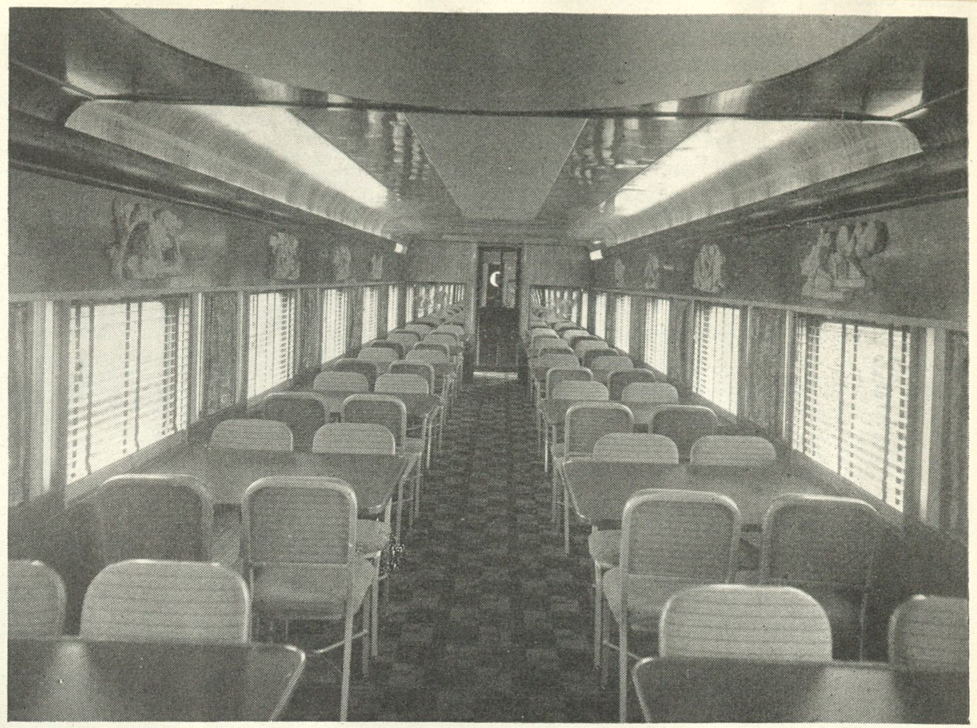
***THE RECLAMATION COMMITTEE***

ew Reclamation Campaign Instituted on the St. Paul

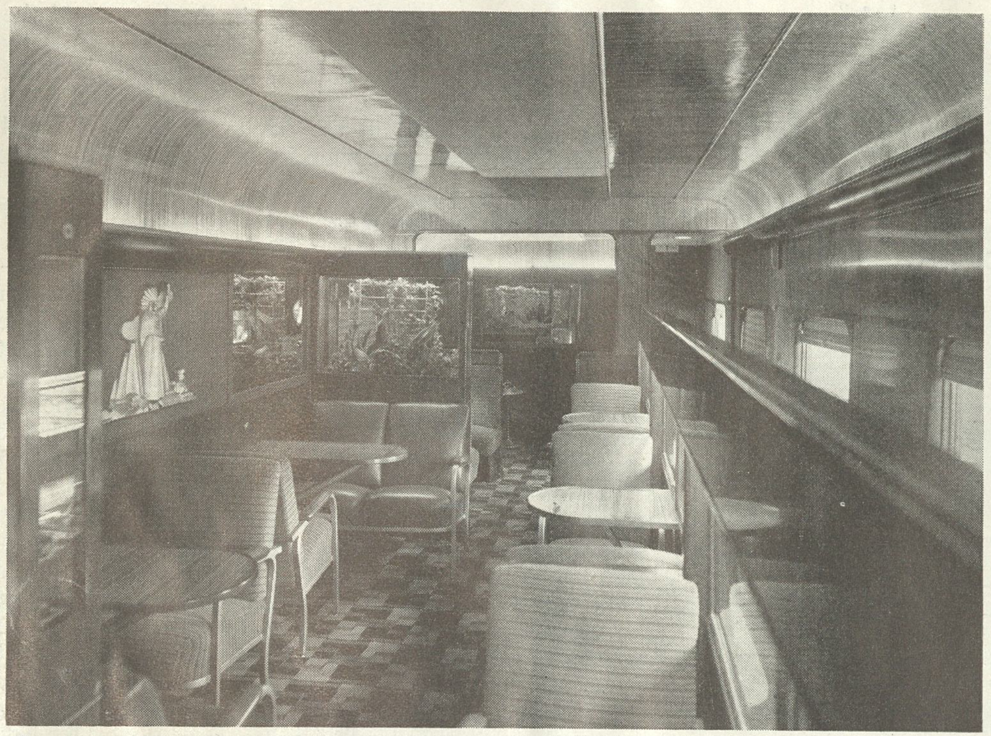
es of the St. Paul. In the near future it is proposed to d conferences at Chicago to discuss and develop this recla- tion work, and it is proposed thereafter to hold these con- ences from time to time and take up the subject of the amation of various groups of materials.



*One of the 1942 Coaches,* 25 BLT MILW SHOPS

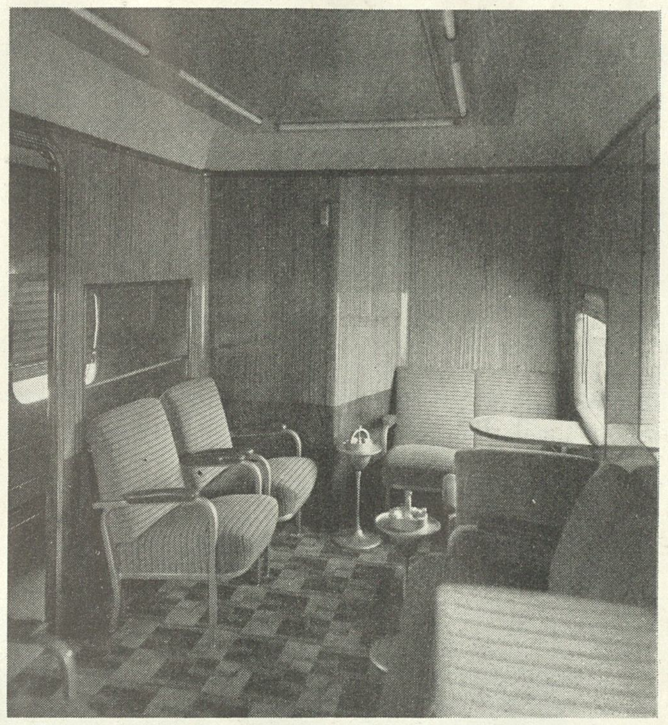


DINER - TWO BUILT MILW SHOPS 1942

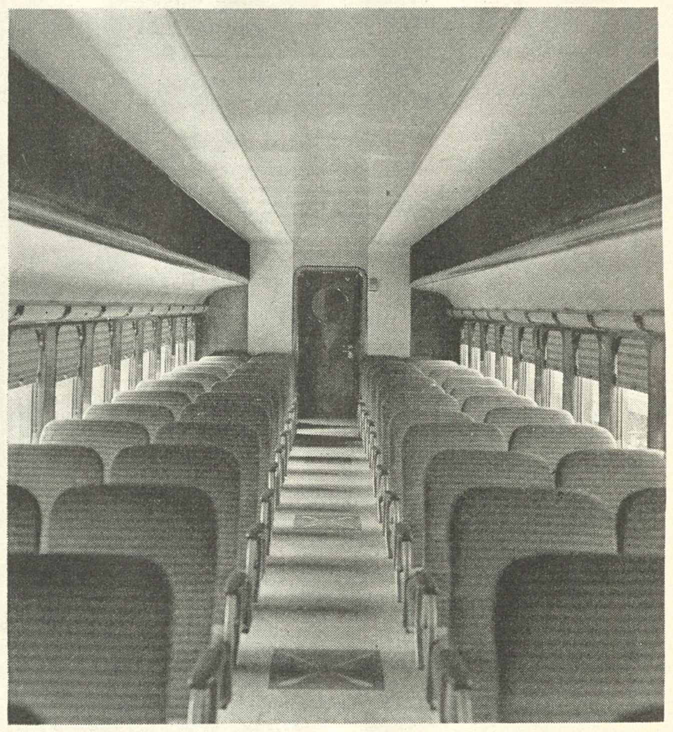


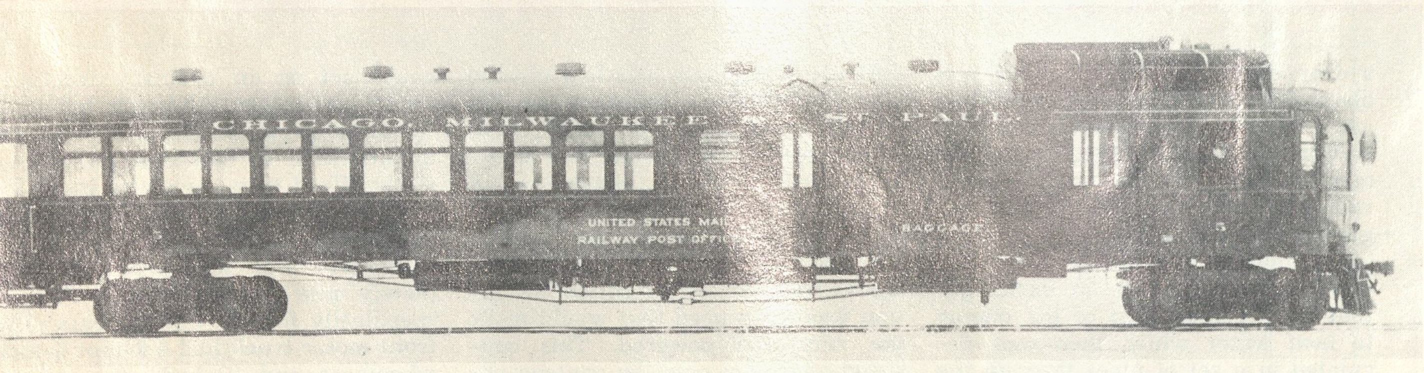
ONE of TWO REFRESHMENT CARS MILW SHOPS 1942

DURING 1942, the Chicago, Milwaukee, St. Paul & Pacific built at its company shops, Milwaukee, Wis., 31 welded all-steel passenger cars, including 2 diners, 2 auxiliary dining cars, 2 passenger-baggage cars and 25 coaches. This new equipment, built primarily for the Hiawatha, constitutes the fourth edition of the train since it was first inaugurated in May, 1935, and includes entirely new equipment except for the parlor and beaver-tail cars. The replaced cars, substituted in other trains, helped meet the urgent demand for additional passenger equipment and undoubtedly were an important factor in enabling the Milwaukee to handle a record-breaking passenger traffic, both war and civilian, in 1942. The number of passenger miles, for example, increased from over 565 million in 1941 to about 984 million in 1942, or roughly 74 per cent.



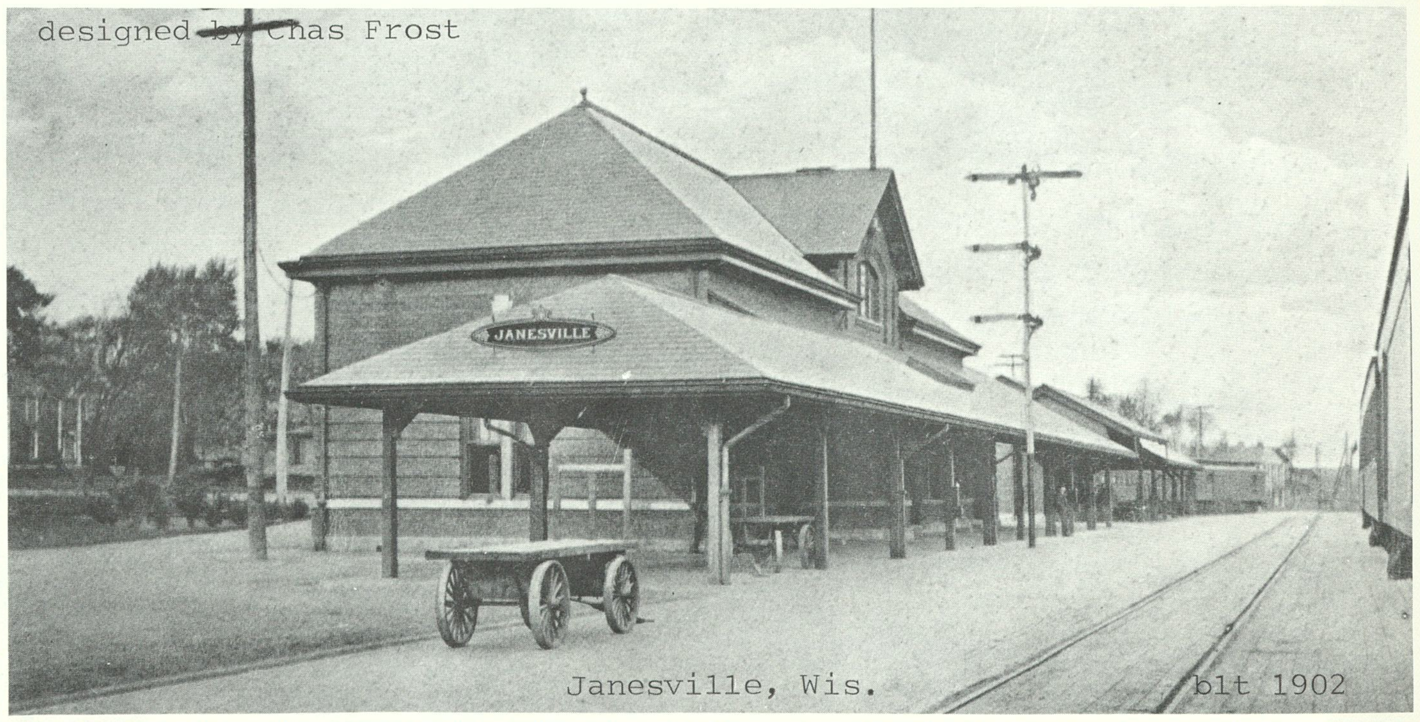
SMOKING ROOM 1942 COACH





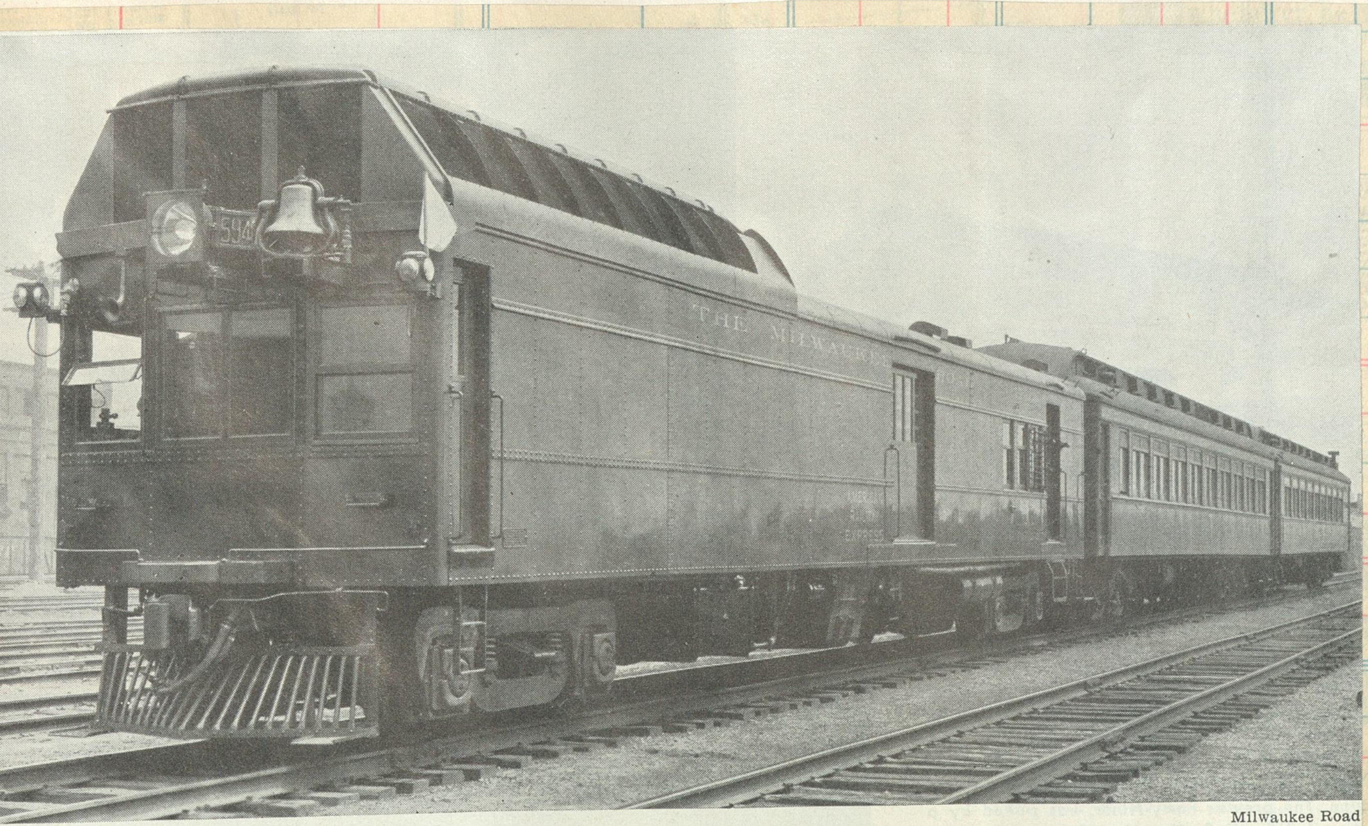
**MILWAUKEE'S NO. 5 poses for its builder portrait at Erie in a rd in March 1913. This car was one of the few GE railcars built with an RPO section; it measured 10 feet in length. The car, turned out in 1913, was repowered with a Foos diesel engine in October 1927.**

Collection of George Lanning



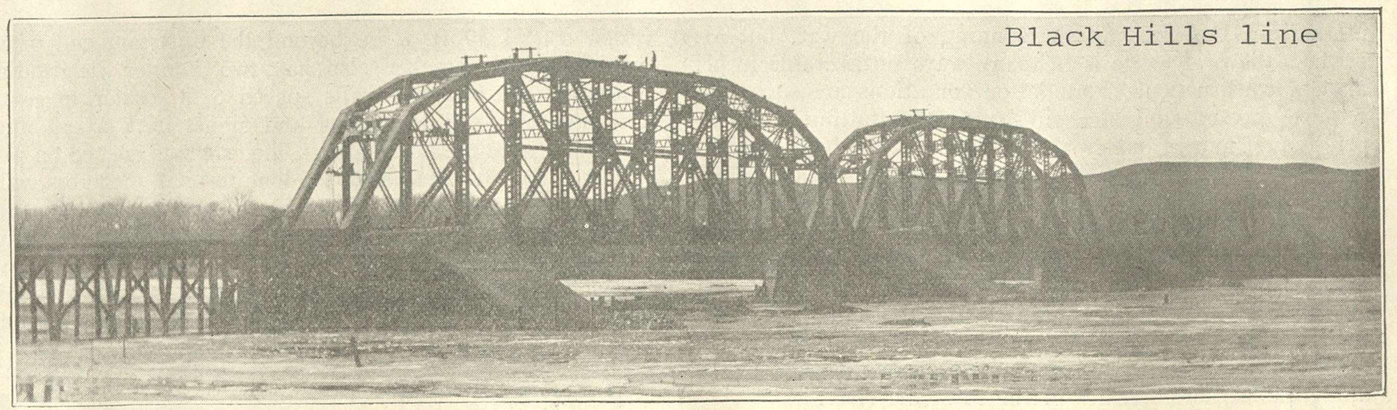
designed by Chas Frost

Janesville, Wis. blt 1902



Milwaukee Road

**at has become of the Locomotor? The Milwaukee Road acquired two of these high-pressure steam railcars back in 1931 and put them in servic ween Davenport, Ia., and Kansas City, Mo. Great things were expected of the Locomotors, but they proved unsatisfactory and were retired i 8 and 1939. They used steam at 700 pounds pressure working through two eight-cylinder uniflow steam engines developing 225 horsepower each**



Black Hills line

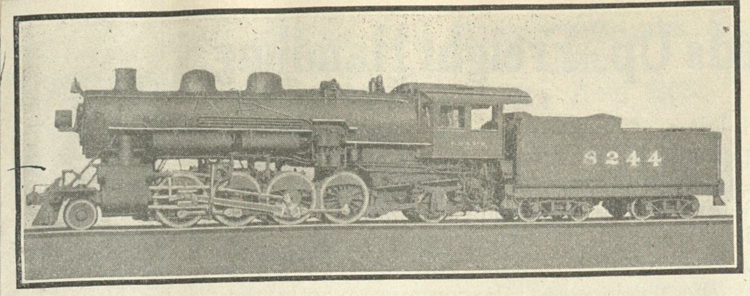
*Two 300-ft. Spans on Pile Piers*

new crossing (1918) Missouri R Chamberlain, S.D.

the TION

Clos. No. Sold Amount Clo

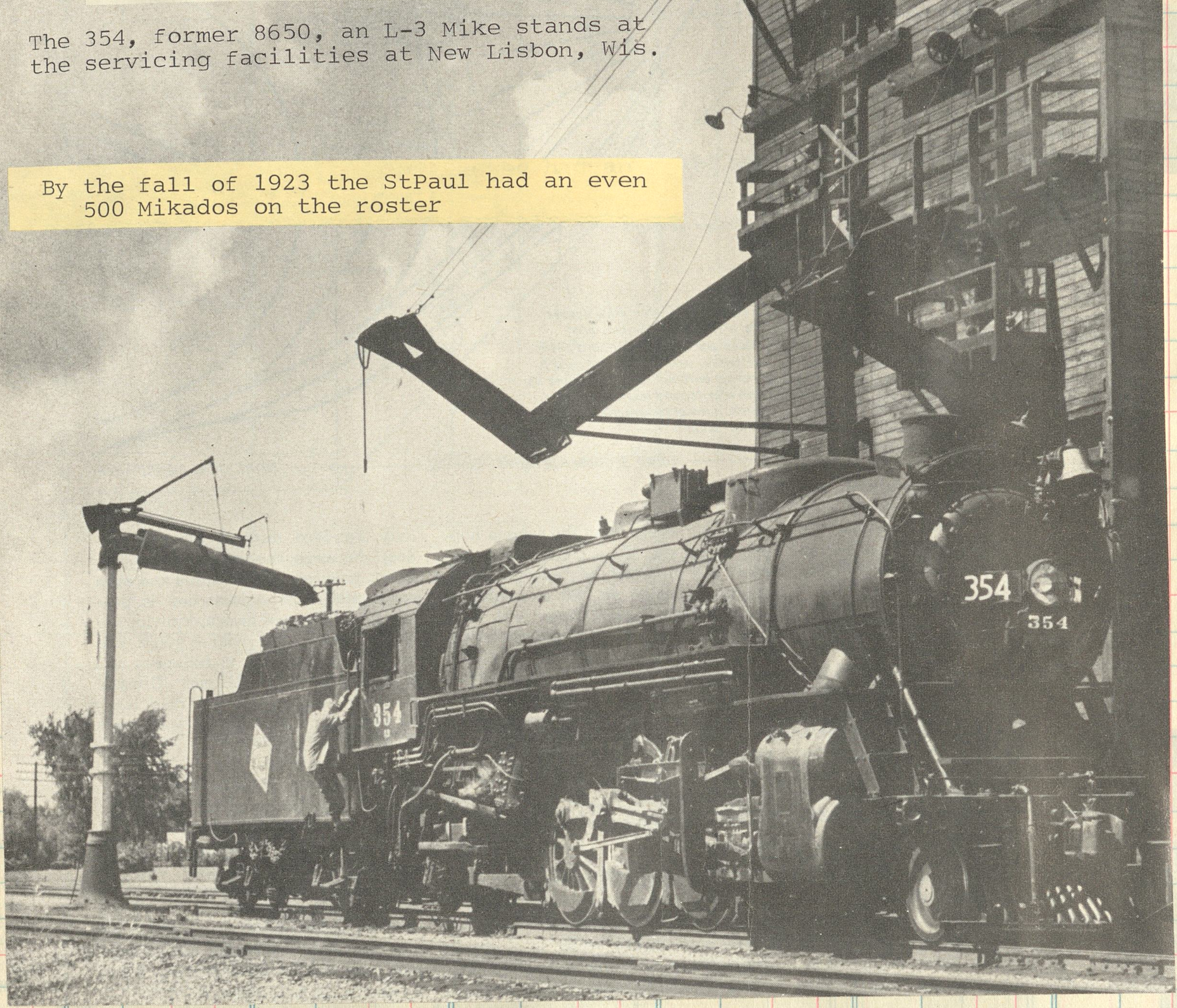
55



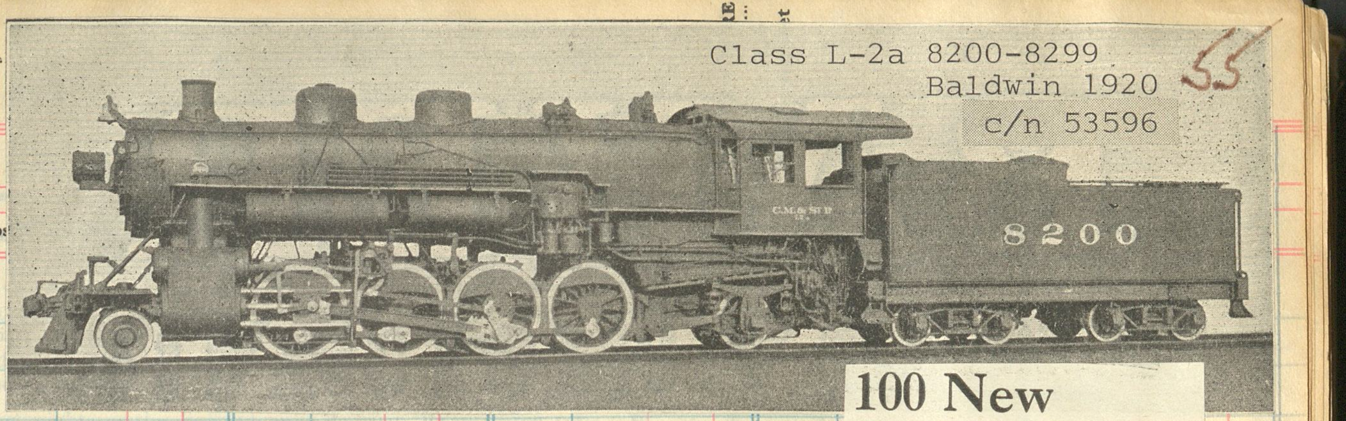
*Chicago, Milwaukee & St. Paul Ry. handled the special train from Chicago to Omaha, distance 500 miles. Duplex Stoker-fired locomotive No. 8244 was one of the Stoker-fired locomotives that handled the train on the Milwaukee.*

The 354, former 8650, an L-3 Mike stands at the servicing facilities at New Lisbon, Wis.

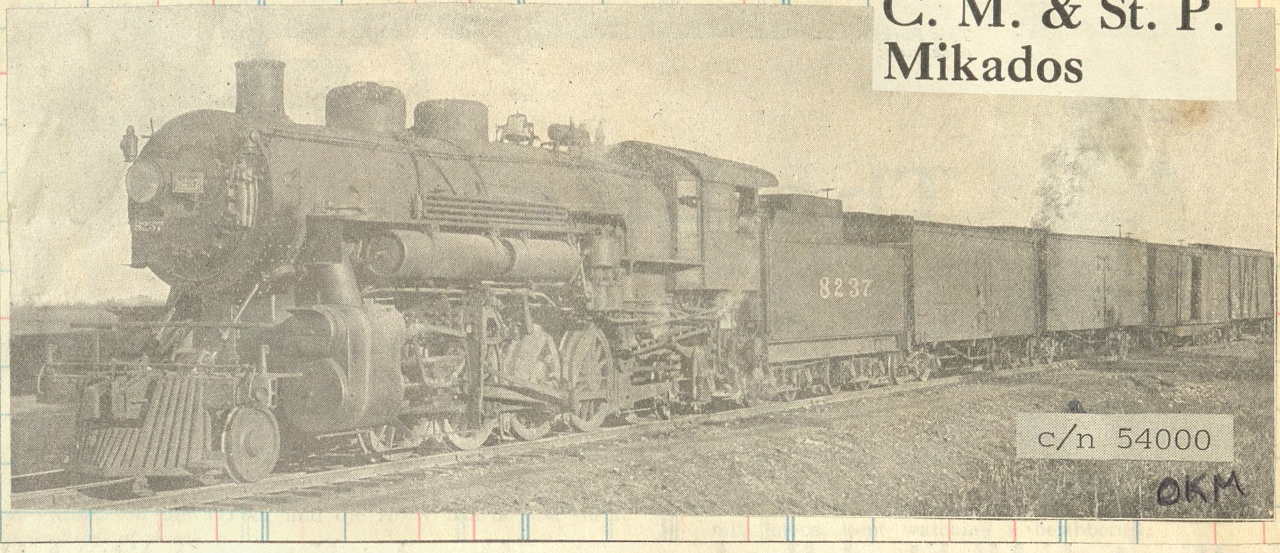
By the fall of 1923 the StPaul had an even 500 Mikados on the roster



Class L-2a 8200-8299
Baldwin 1920
c/n 53596



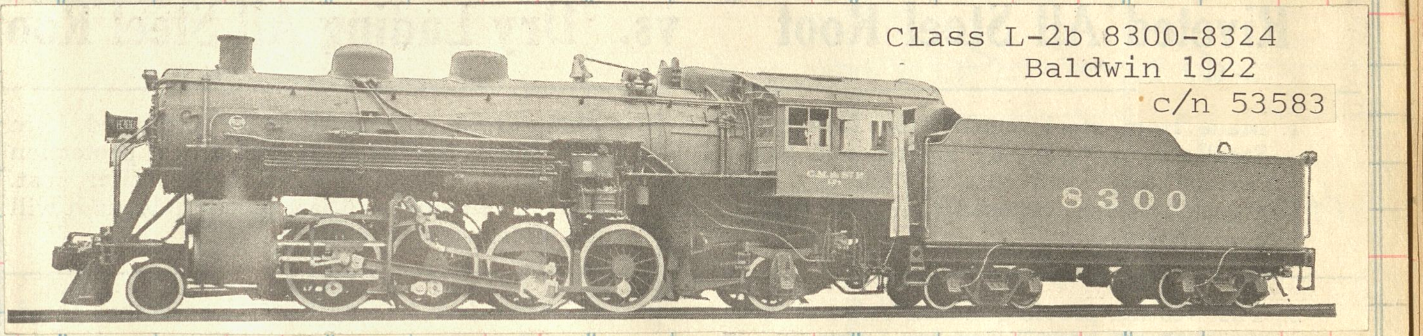
**100 New C. M. & St. P. Mikados**

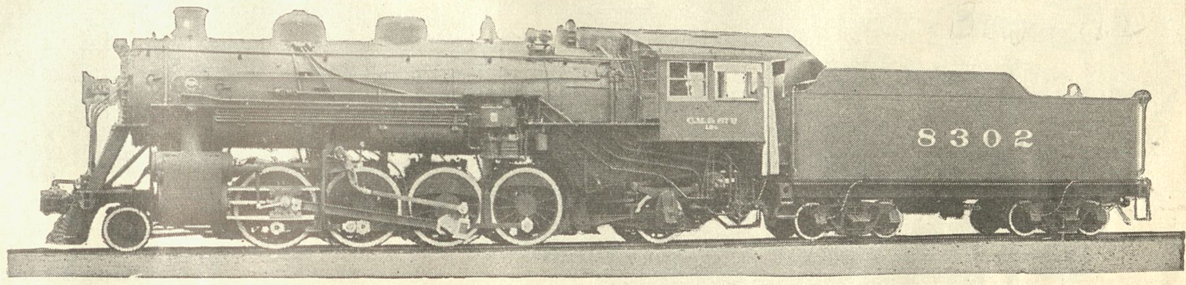


c/n 54000

OKM

Class L-2b 8300-8324
Baldwin 1922
c/n 53583

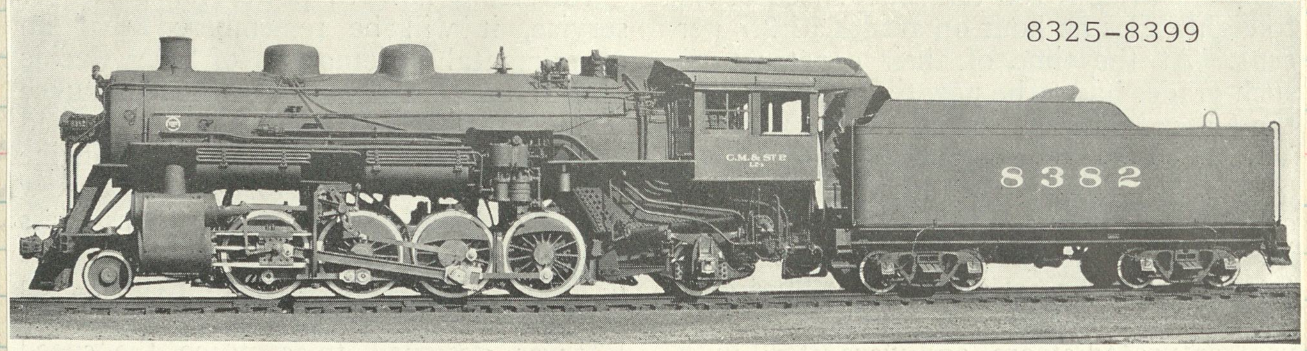




MIKADO TYPE LOCOMOTIVE FOR THE CHICAGO, MILWAUKEE & ST. PAUL RAILWAY

Cylinders, 26" x 30" Weight, total engine, 292,760 lb.
Driving wheels, diameter, 63" Tractive force, 54,720 lb.

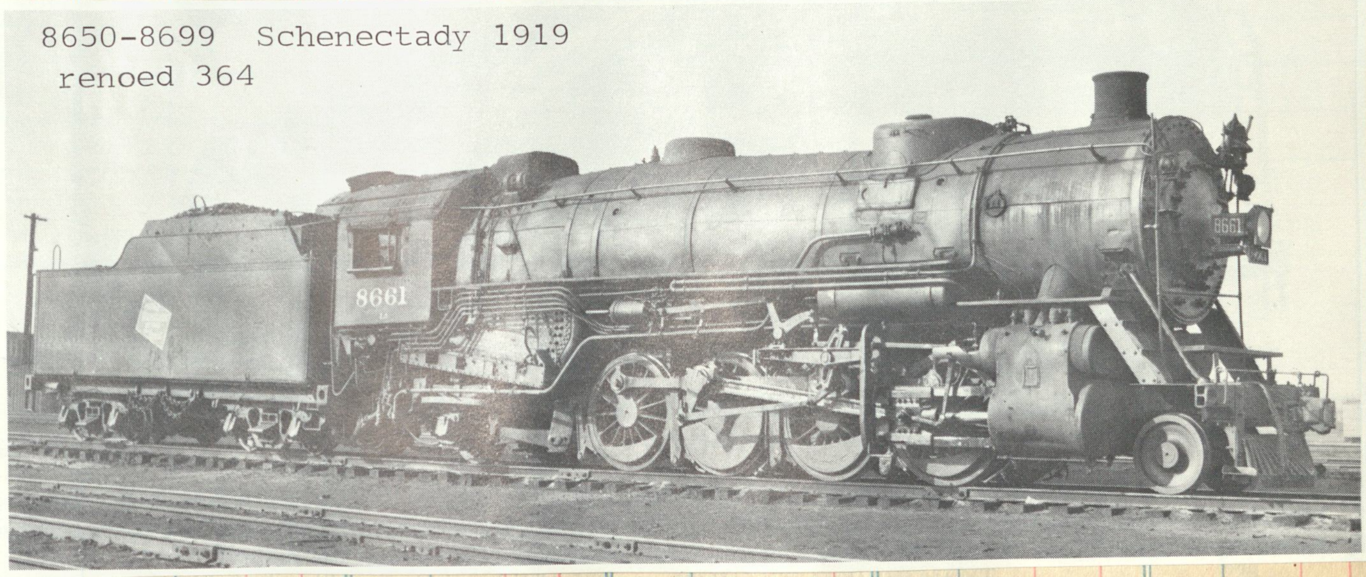
8325-8399

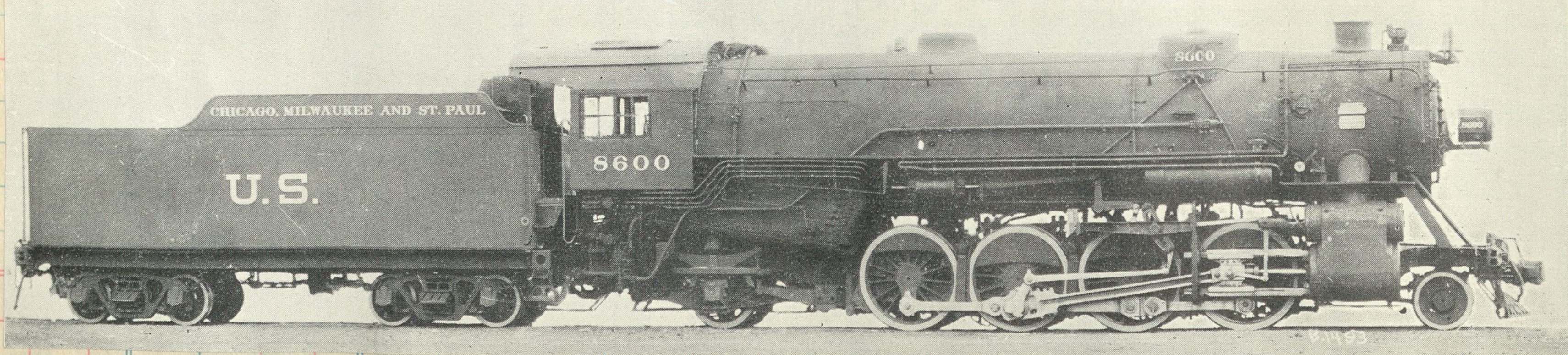


**Mikado Type Locomotive, Class L2-b, Built by The Baldwin Locomotive Works, 1923**

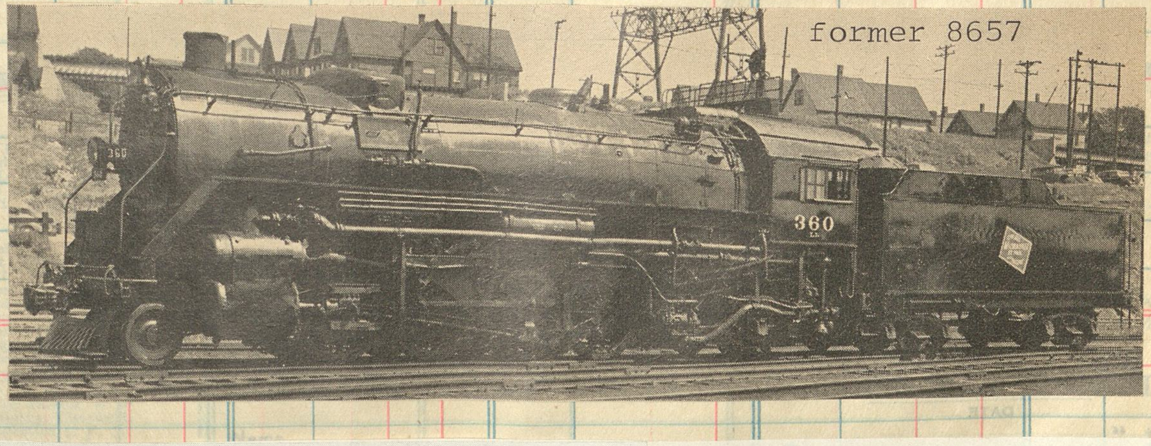
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 26" x 30" | Tubes, number | 5⅜", 34; 2", 198 | Wheel base, driving | 16' 6" | Weight, total engine | 292,770 lb. |
| Drivers, diam. | 63" | " length | 17' 6" | " " total engine | 35' 3" | " " " and | |
| Boiler, diam. | 77¾" | Grate area | 48.8 sq. ft. | " " " " and | | tender | 490,900 lb. |
| Steam pressure | 200 lb. | Water heating surface | 2924 sq. ft. | tender | 70' 6½" | Tank capacity | 10,000 U. S. gal. |
| Firebox | 107" x 65¾" | Superheating surface | 685 sq. ft. | Weight on drivers | 220,950 lb. | Fuel " | 16 tons |
| Tubes, diam. | 5⅜" & 2" | | | | | Tractive force | 54,720 lb. |

8650-8699 Schenectady 1919
renoed 364

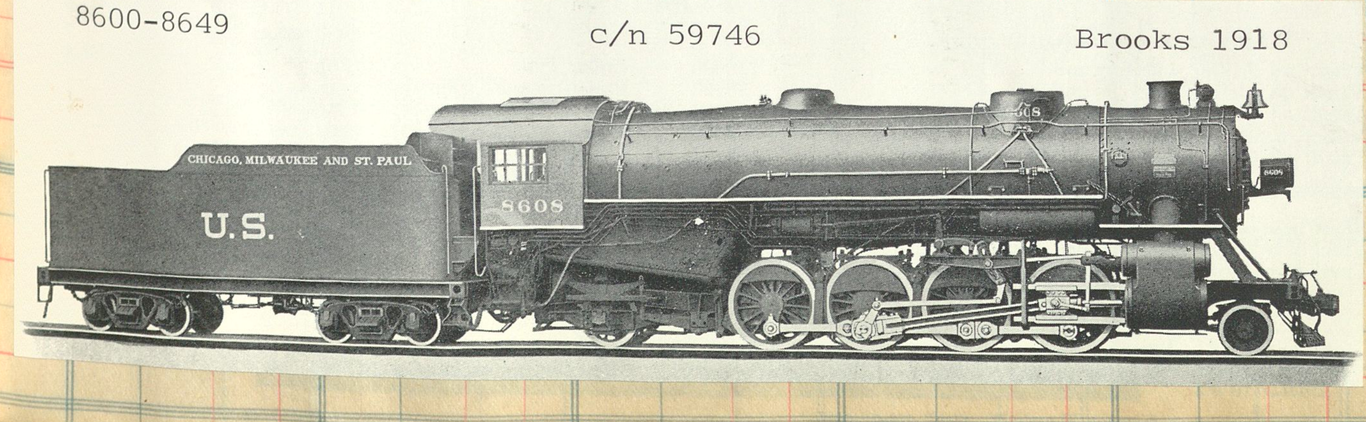




former 8657



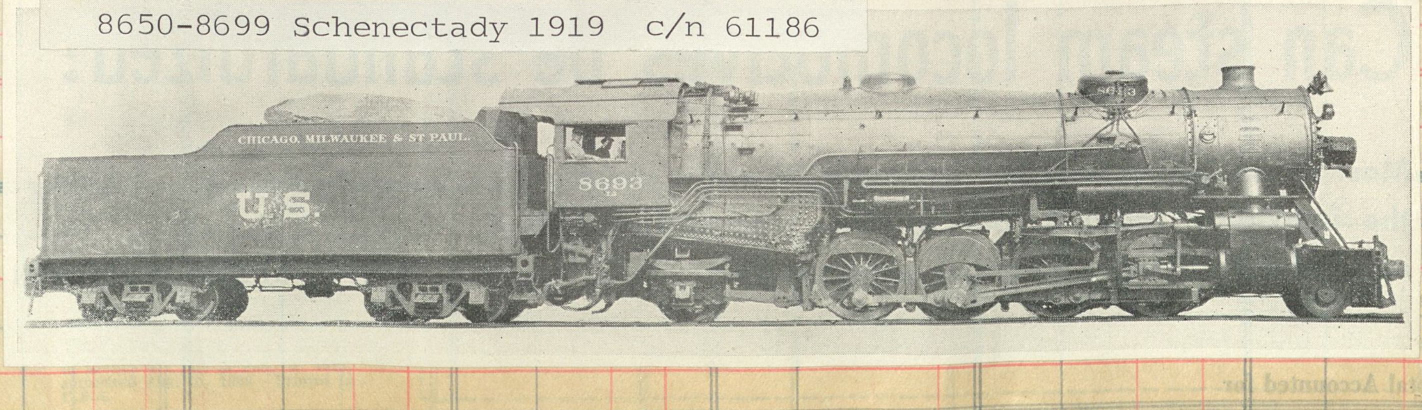
8600-8649 c/n 59746 Brooks 1918



| | |
|---|---|
| Cylinders | 27" x 32" |
| Drivers, diam. | 63" |
| Steam pressure | 190 lb. |
| Grate area | 70.5 sq. ft. |
| Water heating surface | 4311 sq. ft. |
| Superheating surface | 993 sq. ft. |
| Weight on drivers | 239,000 lb. |
| " total engine | 320,000 lb. |
| Tractive force | 59,800 lb. |

8600

8650-8699 Schenectady 1919 c/n 61186



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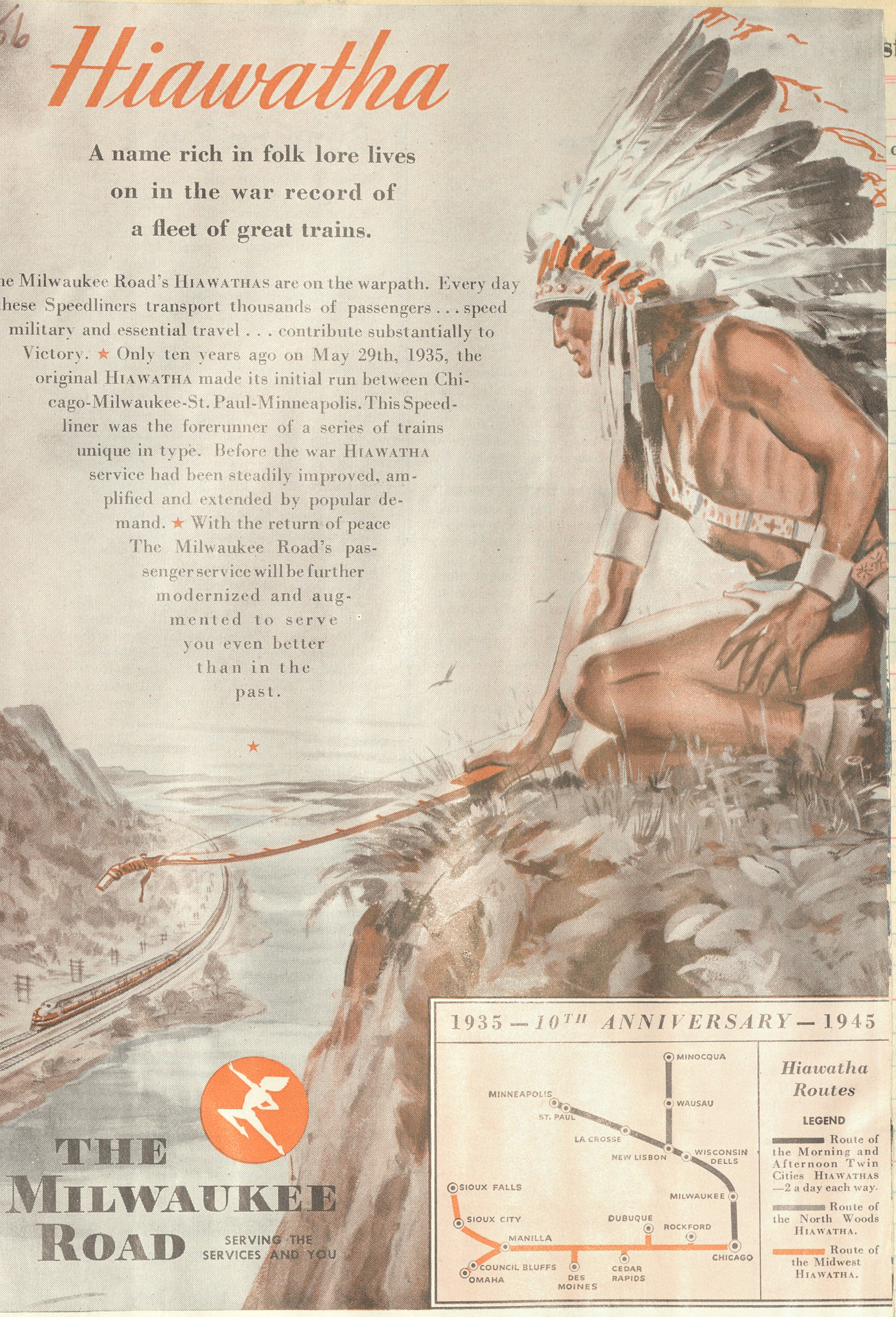

THE MILWAUKEE ROAD
SERVING THE SERVICES AND YOU
1935 — 10TH ANNIVERSARY — 1945
MINOCQUA
WAUSAU
MINNEAPOLIS
ST. PAUL
LA CROSSE
NEW LISBON
WISCONSIN DELLS
MILWAUKEE
SIOUX FALLS
SIOUX CITY
MANILLA
DUBUQUE
ROCKFORD
CHICAGO
COUNCIL BLUFFS
OMAHA
DES MOINES
CEDAR RAPIDS
Hiawatha Routes
LEGEND
Route of the Morning and Afternoon Twin Cities HIAWATHAS —2 a day each way.
Route of the North Woods HIAWATHA.
Route of the Midwest HIAWATHA.

# *Hiawatha*

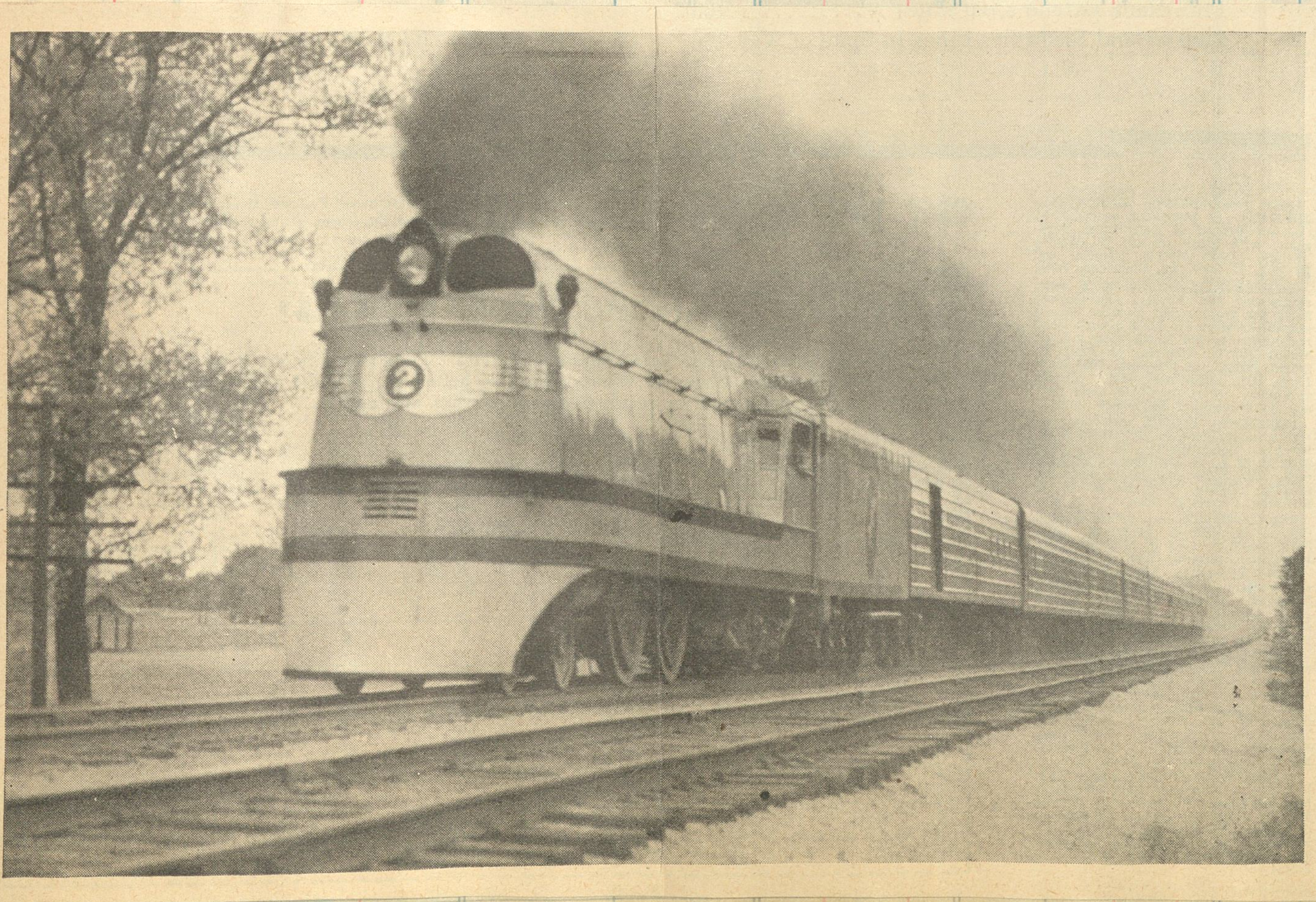
**A name rich in folk lore lives on in the war record of a fleet of great trains.**

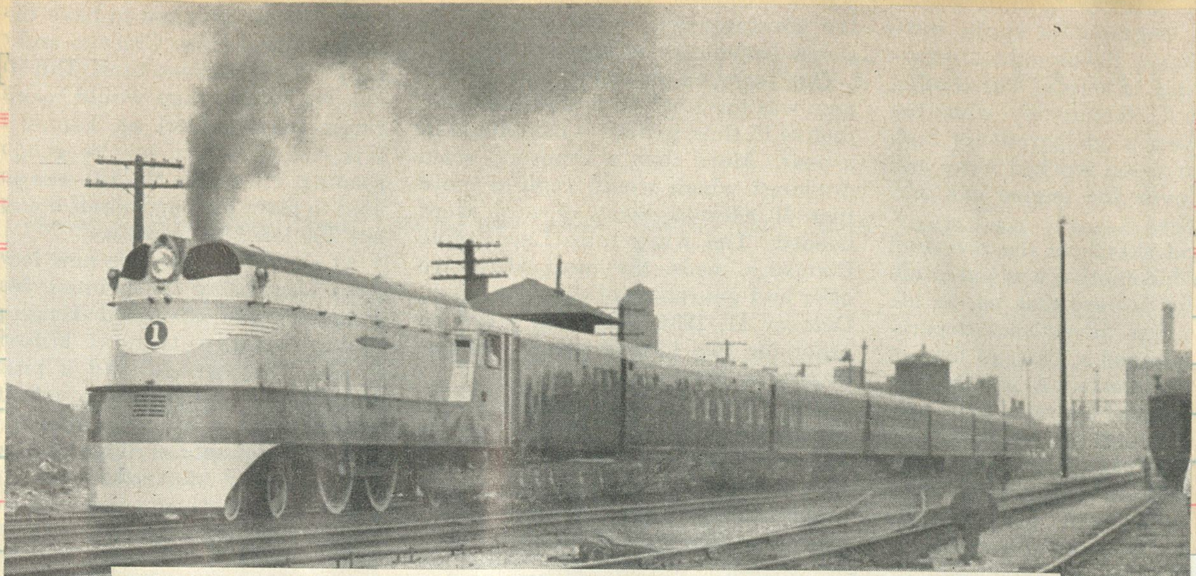
he Milwaukee Road's HIAWATHAS are on the warpath. Every day hese Speedliners transport thousands of passengers . . . speed military and essential travel . . . contribute substantially to Victory. ★ Only ten years ago on May 29th, 1935, the original HIAWATHA made its initial run between Chicago-Milwaukee-St. Paul-Minneapolis. This Speedliner was the forerunner of a series of trains unique in type. Before the war HIAWATHA service had been steadily improved, amplified and extended by popular demand. ★ With the return of peace The Milwaukee Road's passenger service will be further modernized and augmented to serve you even better than in the past.

★

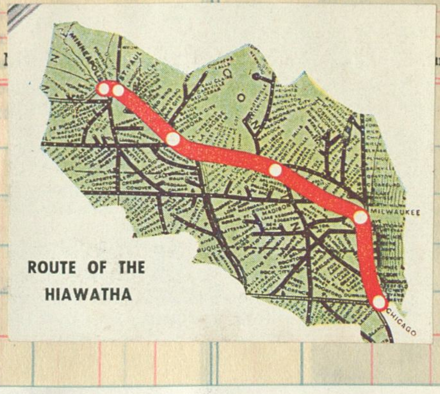
THE HIAWATHA ATLANTICS
Class A
Cyls 19x28 Dvs 84" BP 300# TE 30685

| | | | | |
|---|---|---|---|---|
| #1 | Schenectady | 68684 | May 1935 | Retired Nov 1951 |
| #2 | Schenectady | 68685 | May 1935 | Retired Nov 1951 |
| #3 | Schenectady | 68729 | May 1936 | Retired Sep 1949 |
| #4 | Schenectady | 68828 | Apr 1937 | Retired Jun 1951 |

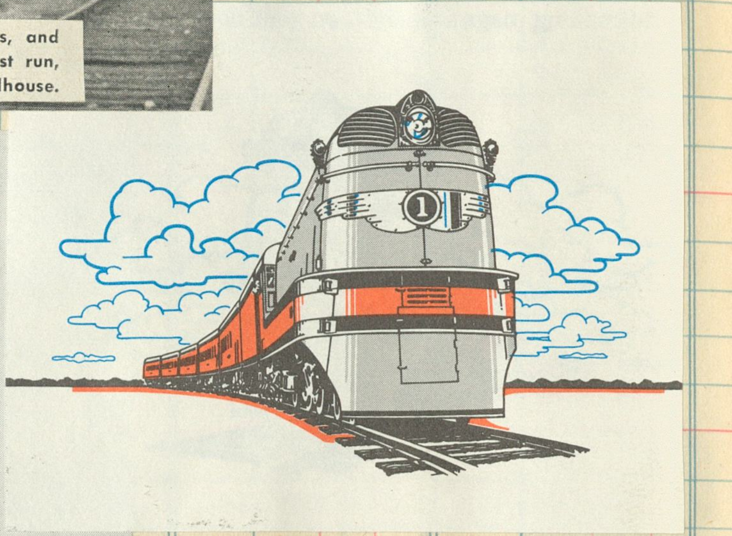


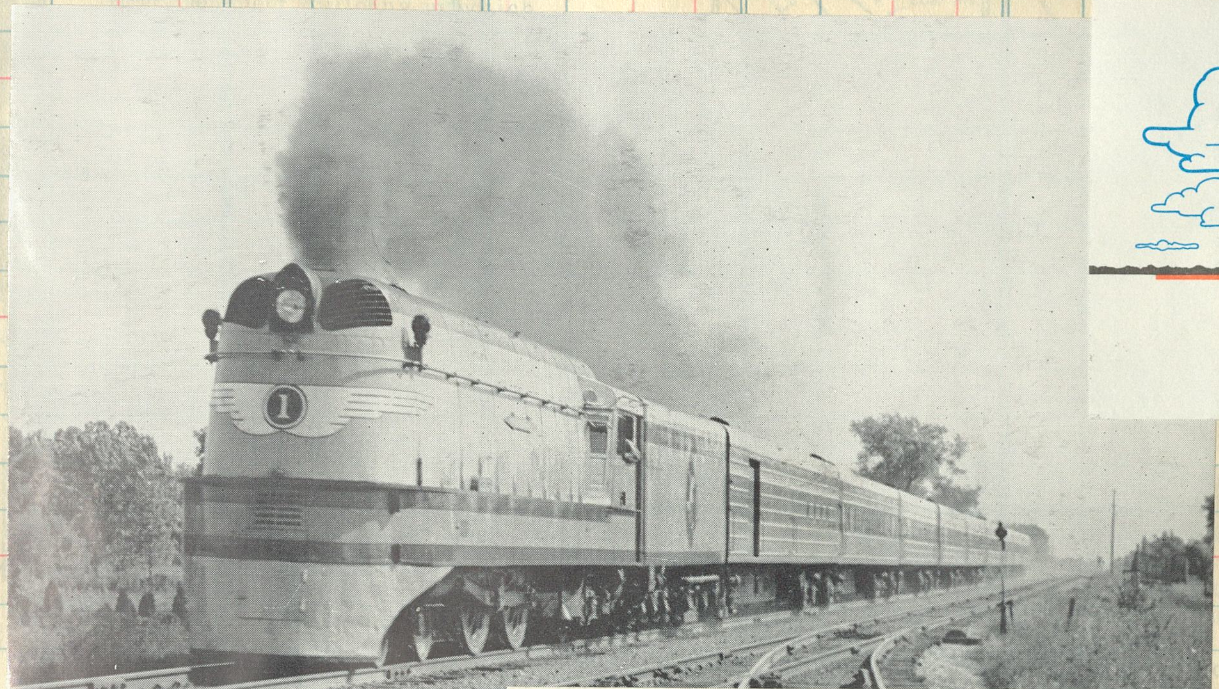


The first Hiawatha steamed out of Chicago's Union Station, sped through the suburbs, and raced fleetfooted to the Twin Cities on May 29, 1935. Here is the streamliner on its first run, powered by class A 4-4-2 No. 1, as it passed the Western Avenue coach yard and roundhouse.

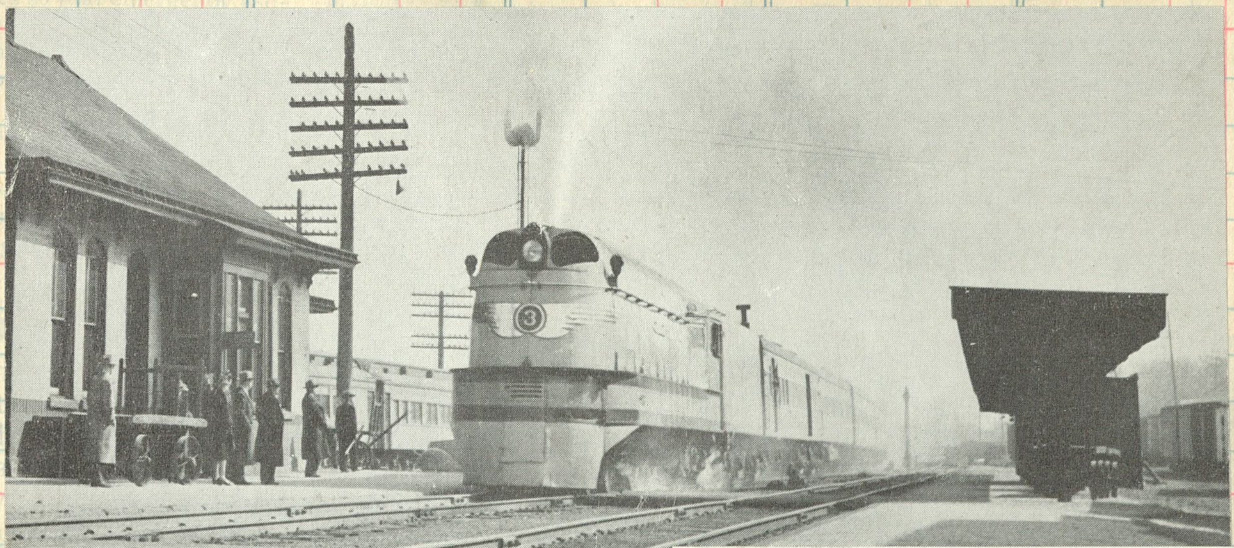

MINNEAPOLIS
ST. PAUL
MILWAUKEE
CHICAGO

ROUTE OF THE HIAWATHA





THE Afternoon Hiawatha splits the breeze at 100 mph through West Lake Forest, Ill.



*Midwest Hiawatha* arriving at Elgin, Ill.

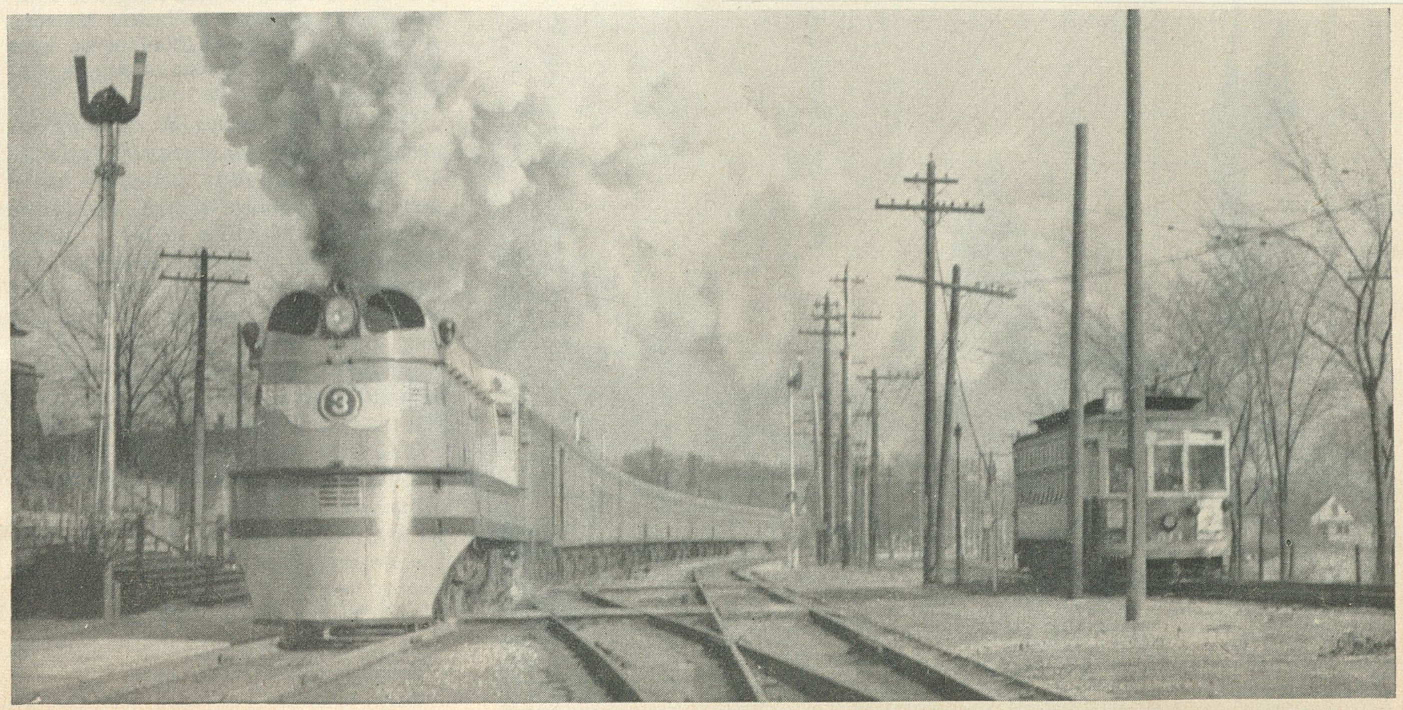
**The Midwest Hiawatha**

Chicago
Rockford
Dubuque
Cedar Rapids
Des Moines
Sioux City
Sioux Falls
Omaha

**The MILWAUKEE Road**

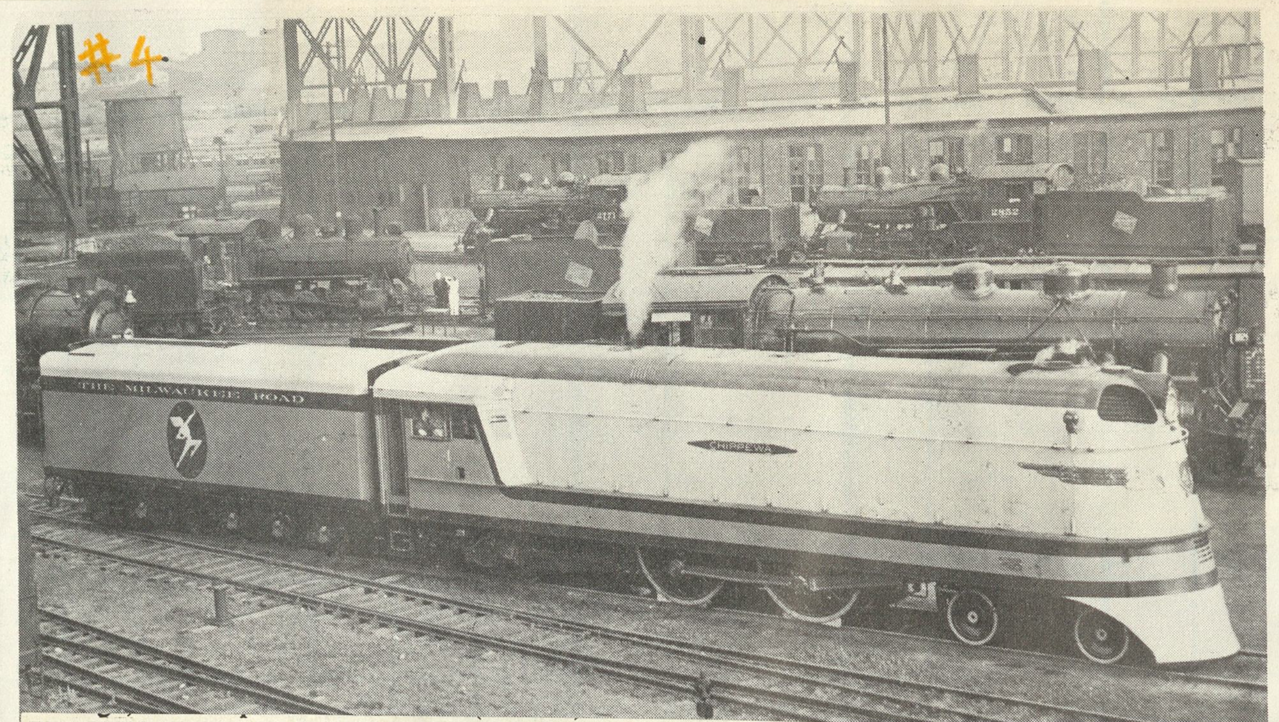
Brings you the finest in modern rail travel.

From Elgin to Davis Junction, Ill., is 43.4 miles, which the *Midwest Hiawatha* of the Milwaukee Road makes in 34 minutes start to stop for an average of 76.6 miles per hour, one of the fastest steam runs in the country. The only faster steam-operated runs are those of the *Detroit Arrow* of the Pennsylvania and the *Twin Cities Hiawathas*, according to the *Railroad Magazine* speed tabulations. The *Midwest Hiawatha* was put on about a year ago as a fast afternoon train (eight hours) for the 488 miles between Chicago and Omaha. Competitive train is the Burlington's Diesel-powered *Exposition Flyer*, which was speeded up to meet the eight-hour schedule. Burlington mileage is 496. The Milwaukee train uses the older series of *Hiawatha* cars, refurbished, and the original Atlantic-type *Hiawatha* locomotives, which were originally designed to pull six-car lightweight trains at cruising speeds of 100 miles per hour, but have been known to take trains of 14 cars and make schedule time. Henry J. McCord gets unusual photos like this and the one on the cover by sticking close to stations and yards.

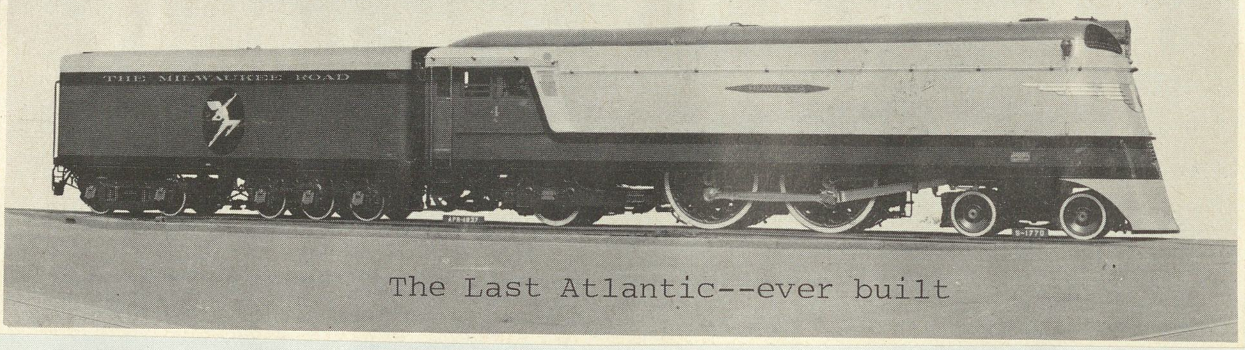


Earl Ruhland.

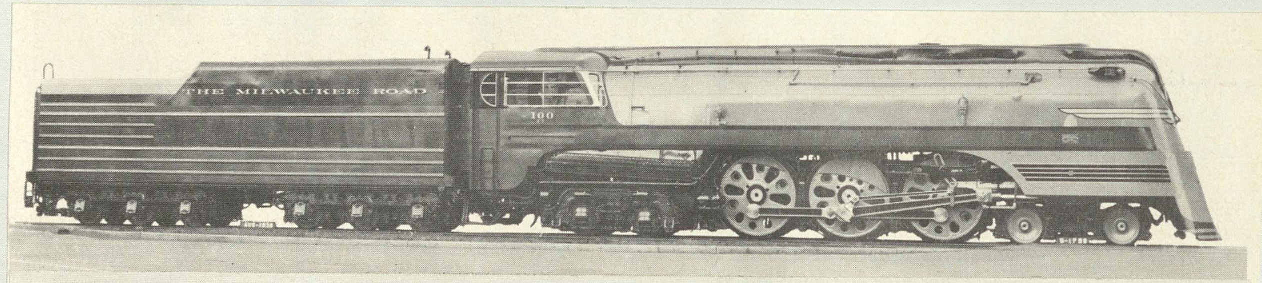
The original six-car Hiawathas became longer trains as more cars were added to take care of the passengers the streamliners brought to the Milwaukee. Two more class A's were built: No. 3 (shown at Wauwatosa, Wis.) in 1936, No. 4 in 1937. In 1938 the A's yielded to F-7 4-6-4's.



#4 c/n 68828 Schenectady Apr 1937



The Last Atlantic--ever built



100-105 c/n 69064 Schenectady 1938

↑

## Morning Hiawatha

(2 trains)

### Chicago, Milwaukee, St. Paul & Pacific

| | |
|---|---|
| Weight of train: | Westbound: 1,836,000 lb.<br>Eastbound: 1,658,000 lb. |
| Consist: | 9 cars and locomotive — 1 express; 1 railway postoffice; 1 tap-buffet-express; 3 coaches; 1 diner; 1 drawing room-parlor; 1 beaver-tail parlor. (Note: 2 additional express cars regularly assigned to westbound schedule. Also extra passenger cars frequently added to a maximum of 14 cars) |
| Placed in service: | January 21, 1939 |
| Operated between: | Chicago and Minneapolis (1 train in each direction daily) |
| Daily mileage per train: | 422 |
| Overall scheduled speed: | 53.9 m.p.h. (Chicago-St. Paul) |
| On time percentage: | 93 per cent |

### Statistics

January 21, 1939, to May 31, 1939

| | |
|---|---|
| Total train miles: | 110,904 |
| Total passengers handled: | 49,525 |
| Total passenger miles: | 9,103,622 |
| Average passengers per train: | 82 |
| Revenue per train mile: | $2.85 |

## Afternoon Hiawatha

(2 trains)

### Chicago, Milwaukee, St. Paul & Pacific

| | |
|---|---|
| Weight of train: | 1,428,000 lb. |
| Consist: | 9 cars and locomotive—1 tap-buffet-express; 4 coaches; 1 diner; 2 drawing room-parlor; 1 beaver-tail parlor. (Note: Extra equipment to a maximum of 14 cars is frequently added.) |
| Placed in service: | May 29, 1935 |
| Operated between: | Chicago and Minneapolis (1 train in each direction daily) |
| Daily mileage per train: | 422 |
| Overall scheduled speed: | 63.1 m.p.h. (Chicago-St. Paul) |
| On time percentage: | 93 per cent |

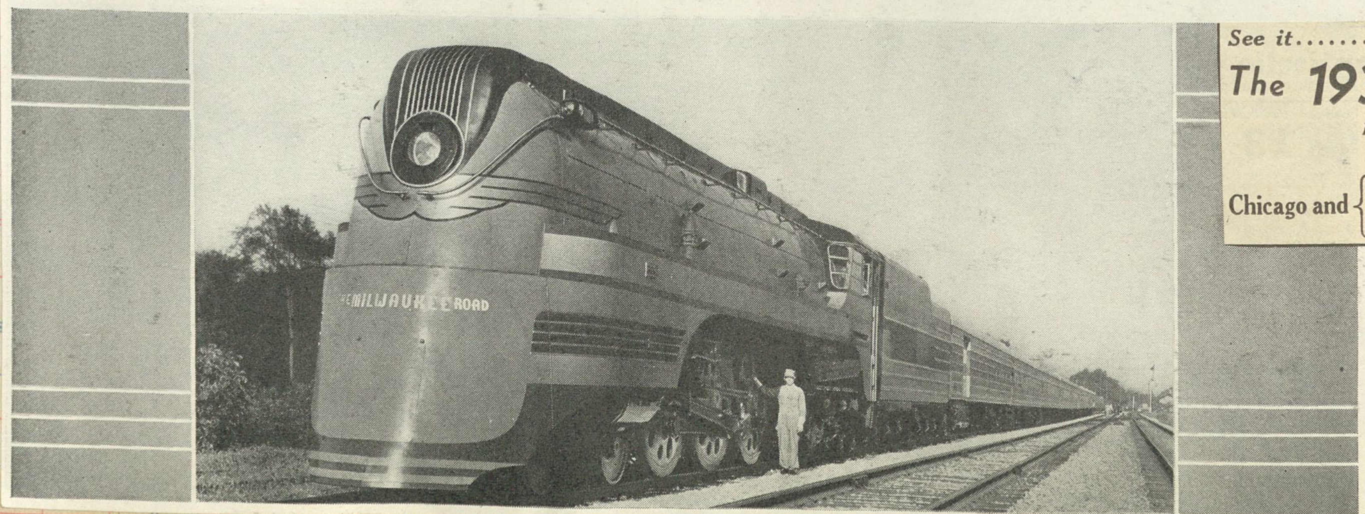
### Statistics

May 29, 1935, to May 31, 1939

| | |
|---|---|
| Total train miles: | 1,421,677 |
| Total passengers handled: | 1,101,057 |
| Total passenger miles: | 266,518,832 |
| Average passengers per train: | 187 |
| Revenue per train mile: | $3.80 |

Remarks: This train began as a 6-car train, now a standard 9-car train, frequently handling up to 14 cars. Original equipment has been replaced by new cars and new locomotives.

↓



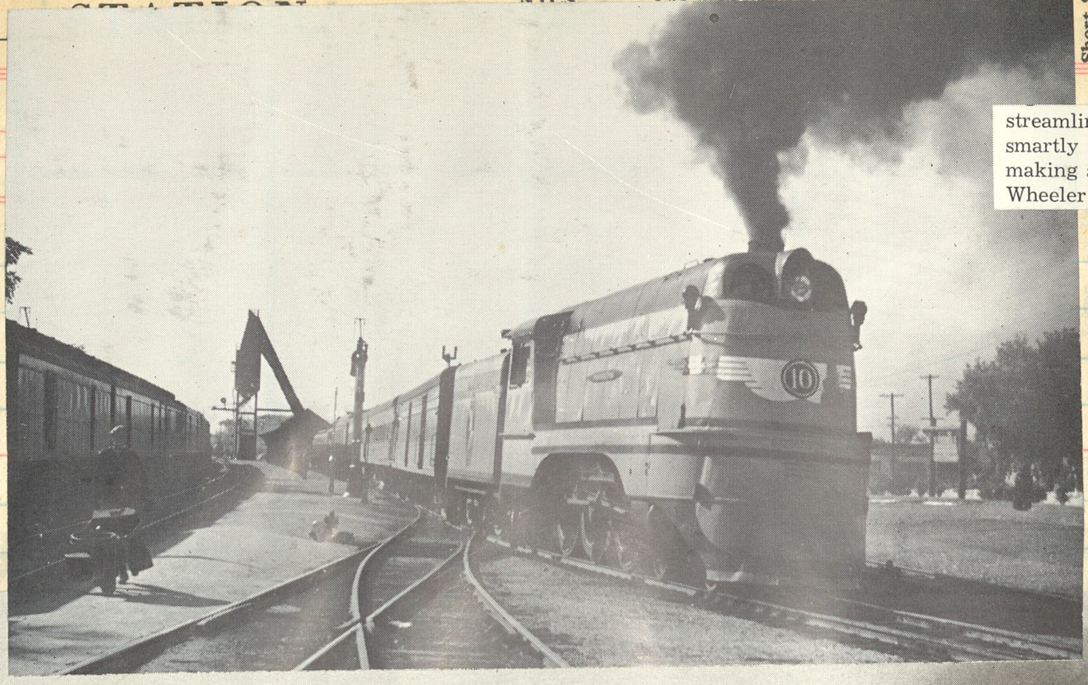
*See it........ride it........enjoy it*

**The 1939 Hiawatha**

*No Extra Fare!*

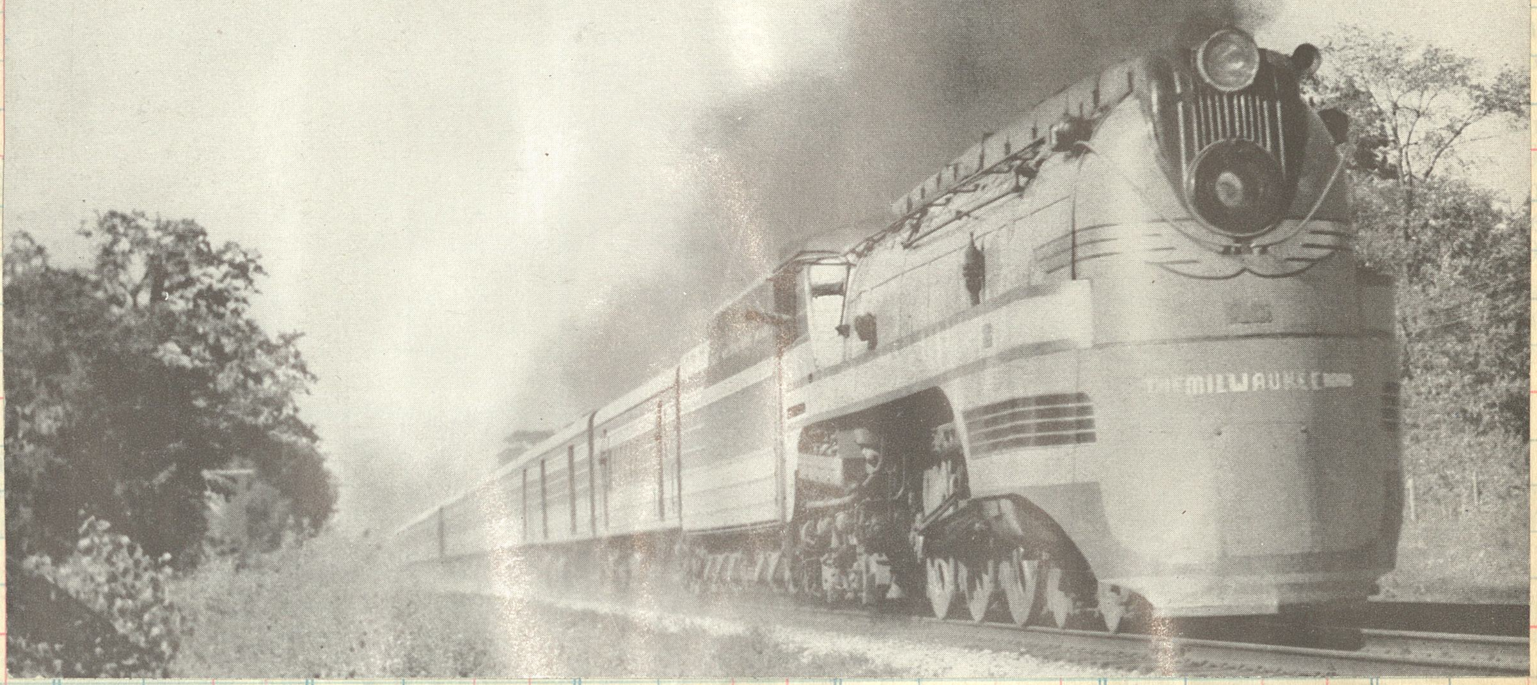
between

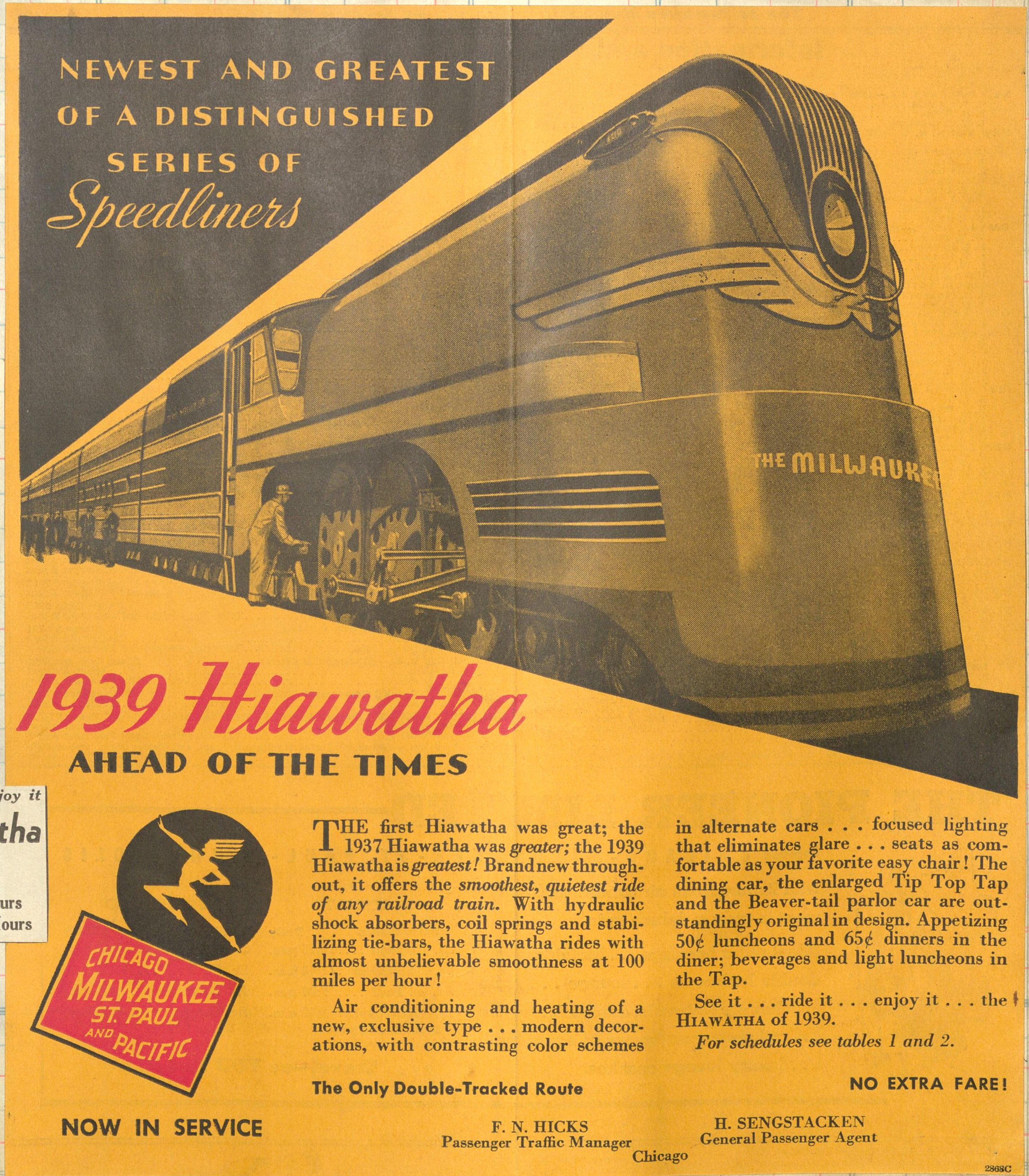
Chicago and { St. Paul—6½ Hours
Minneapolis—7 Hours



streamlined Ten-Wheeler pulls the *North Woods* smartly away toward the northern Wisconsin paper making and vacation country. No. 10 is a rebuilt Ten-Wheeler originally dating back more than 45 years.

At 100 per near Lake Forest, Ill





NEWEST AND GREATEST OF A DISTINGUISHED SERIES OF *Speedliners*

## 1939 Hiawatha

### AHEAD OF THE TIMES

THE first Hiawatha was great; the 1937 Hiawatha was *greater*; the 1939 Hiawatha is *greatest*! Brand new throughout, it offers the *smoothest, quietest ride of any railroad train.* With hydraulic shock absorbers, coil springs and stabilizing tie-bars, the Hiawatha rides with almost unbelievable smoothness at 100 miles per hour!

Air conditioning and heating of a new, exclusive type . . . modern decorations, with contrasting color schemes in alternate cars . . . focused lighting that eliminates glare . . . seats as comfortable as your favorite easy chair! The dining car, the enlarged Tip Top Tap and the Beaver-tail parlor car are outstandingly original in design. Appetizing 50¢ luncheons and 65¢ dinners in the diner; beverages and light luncheons in the Tap.

See it . . . ride it . . . enjoy it . . . the HIAWATHA of 1939.

*For schedules see tables 1 and 2.*

CHICAGO MILWAUKEE ST. PAUL AND PACIFIC

**The Only Double-Tracked Route**

**NO EXTRA FARE!**

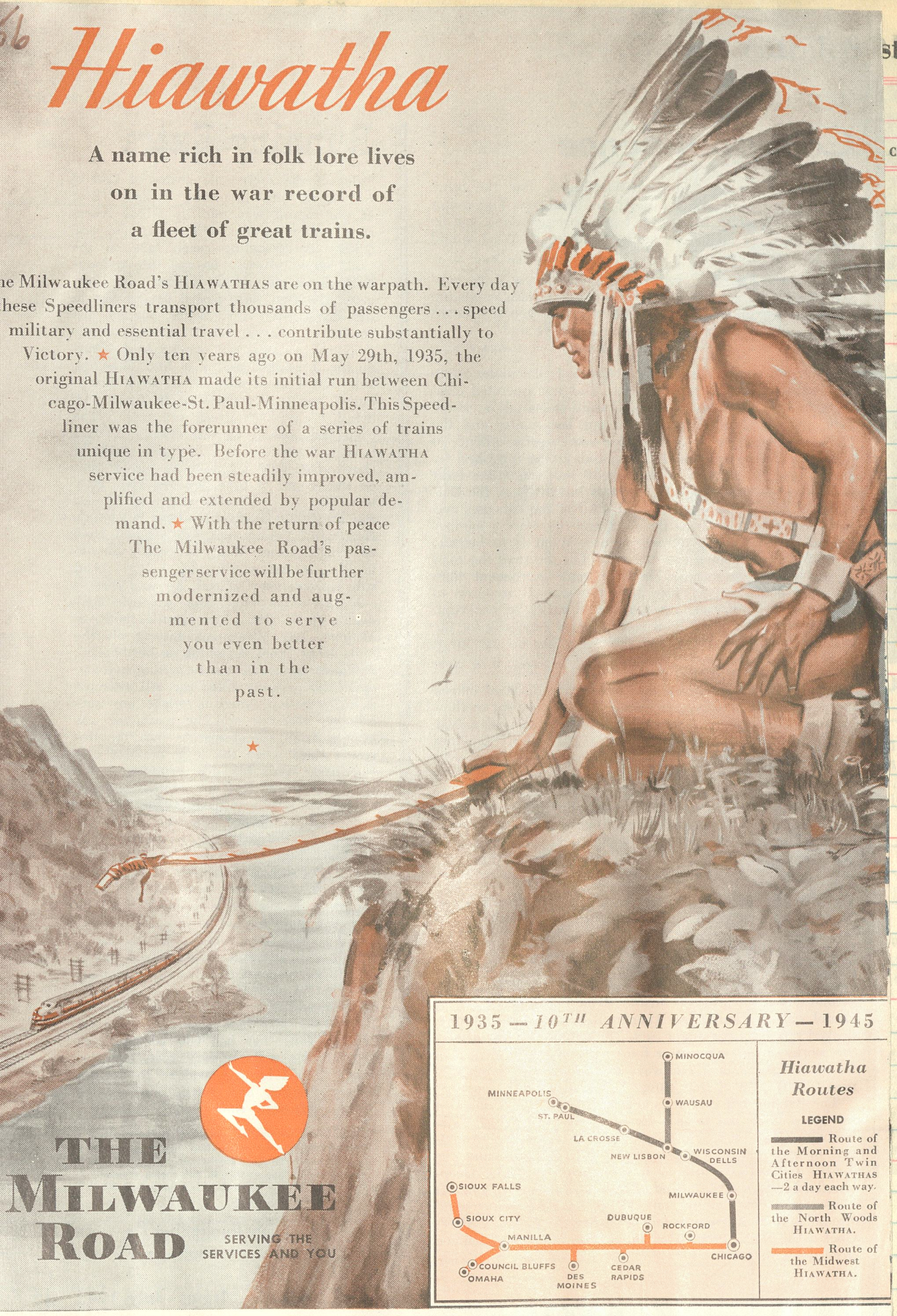
**NOW IN SERVICE**

F. N. HICKS
Passenger Traffic Manager

Chicago

H. SENGSTACKEN
General Passenger Agent

2803C



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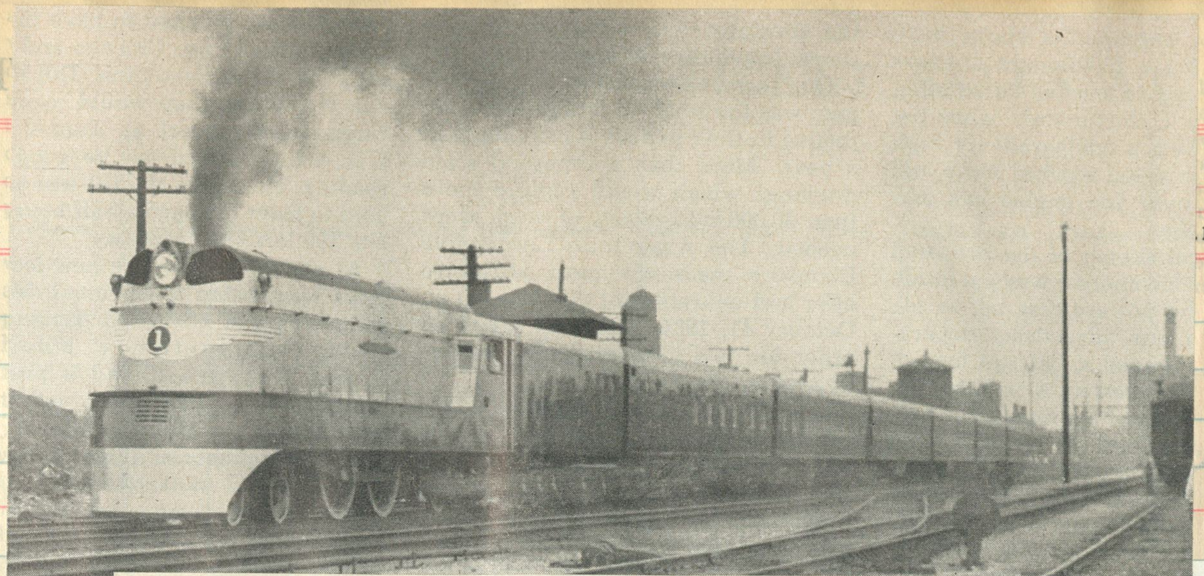
★

1935 — 10TH ANNIVERSARY — 1945

MINOCQUA
MINNEAPOLIS
WAUSAU
ST. PAUL
LA CROSSE
NEW LISBON
WISCONSIN DELLS
SIOUX FALLS
MILWAUKEE
SIOUX CITY
DUBUQUE
ROCKFORD
MANILLA
CHICAGO
COUNCIL BLUFFS
OMAHA
DES MOINES
CEDAR RAPIDS
Hiawatha Routes
LEGEND
Route of the Morning and Afternoon Twin Cities HIAWATHAS —2 a day each way.
Route of the North Woods HIAWATHA.
Route of the Midwest HIAWATHA.

THE MILWAUKEE ROAD

SERVING THE SERVICES AND YOU



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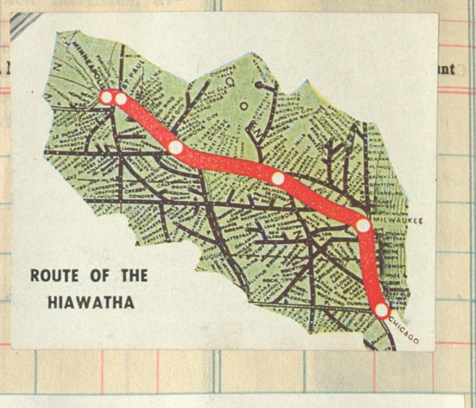
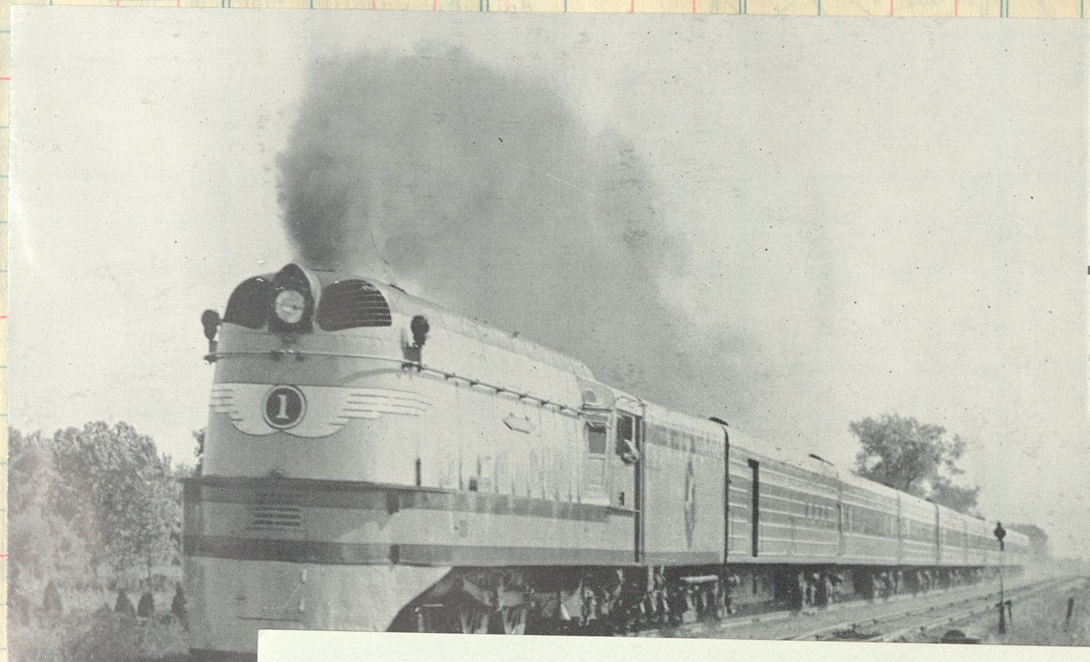
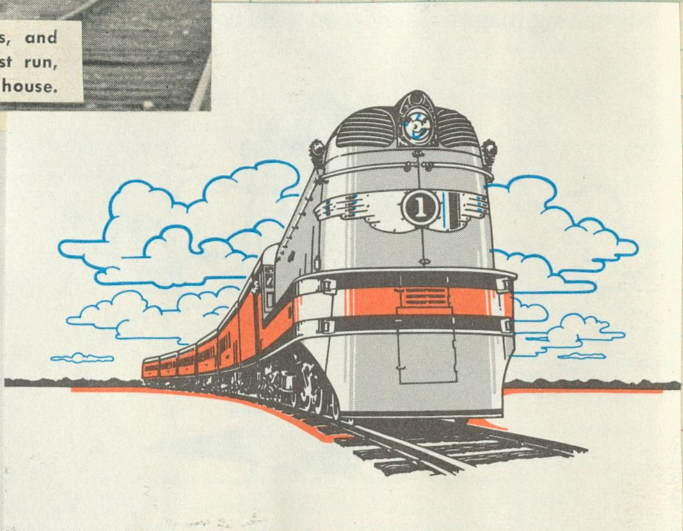
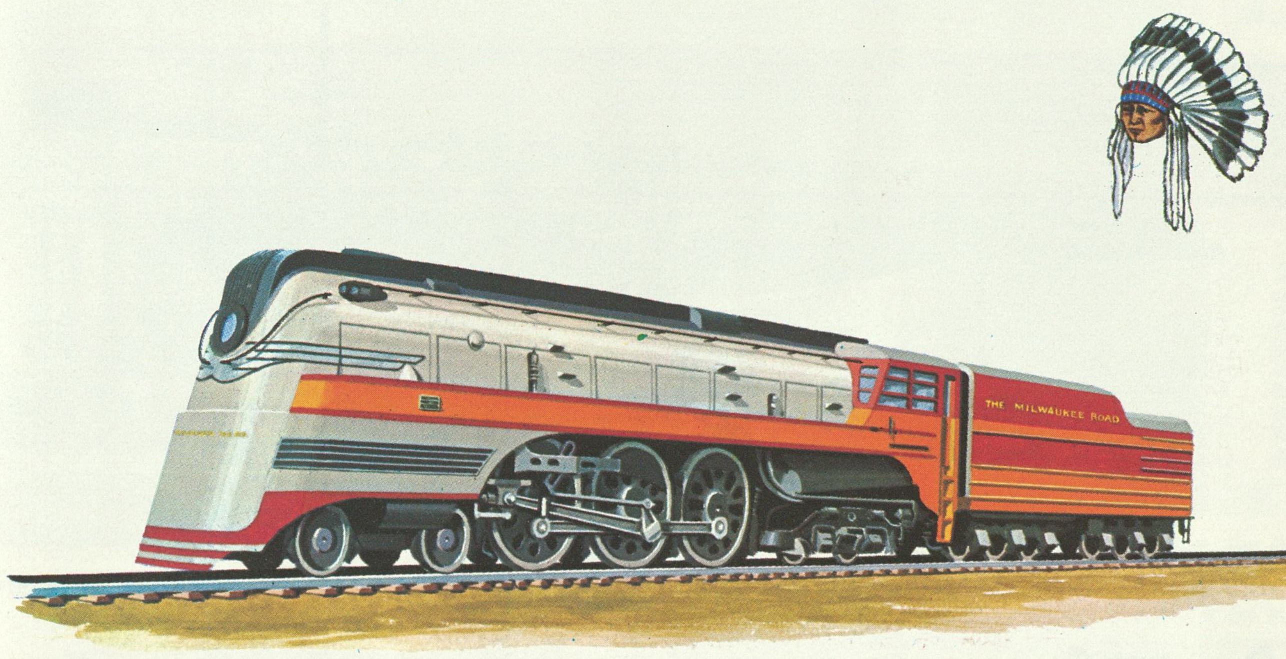


ROUTE OF THE HIAWATHA

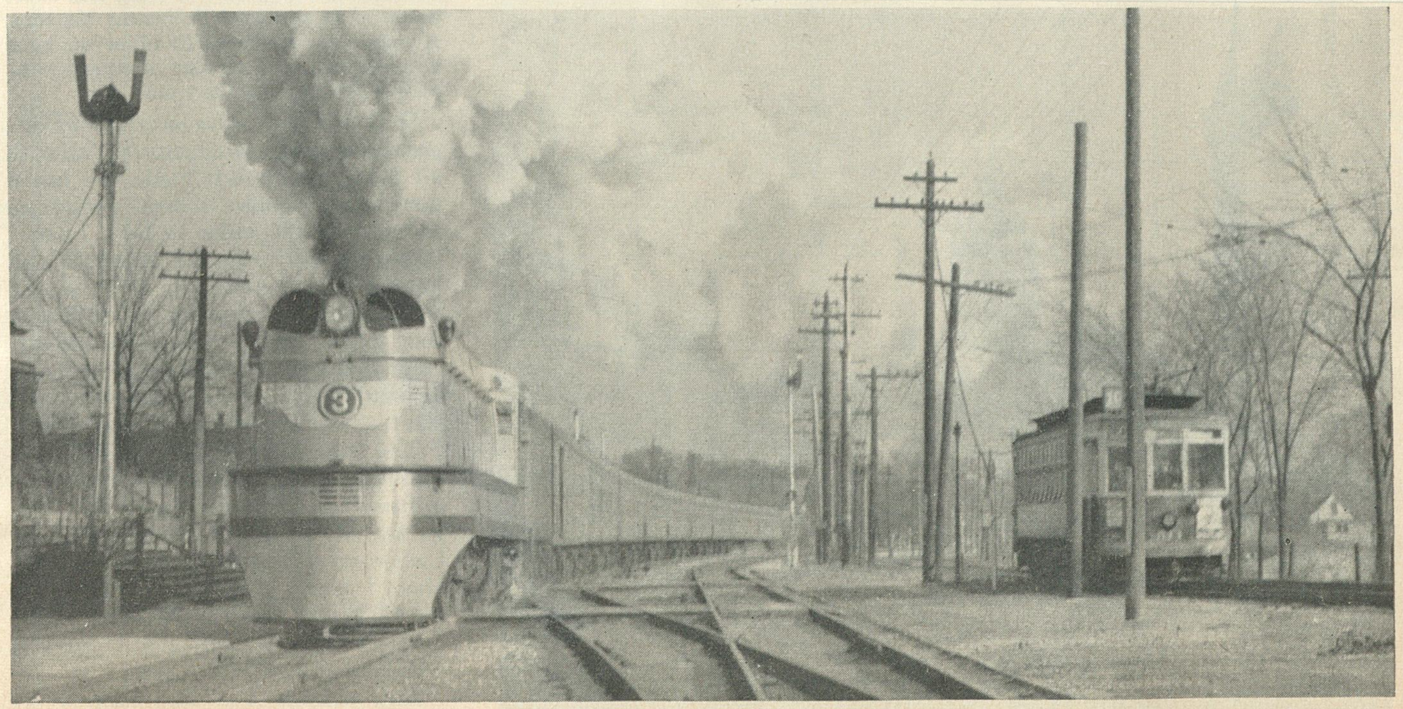






46. **Chicago, Milwaukee, St. Paul and Pacific Railroad:** Streamlined 4-6-4 for the 'Hiawatha' express.

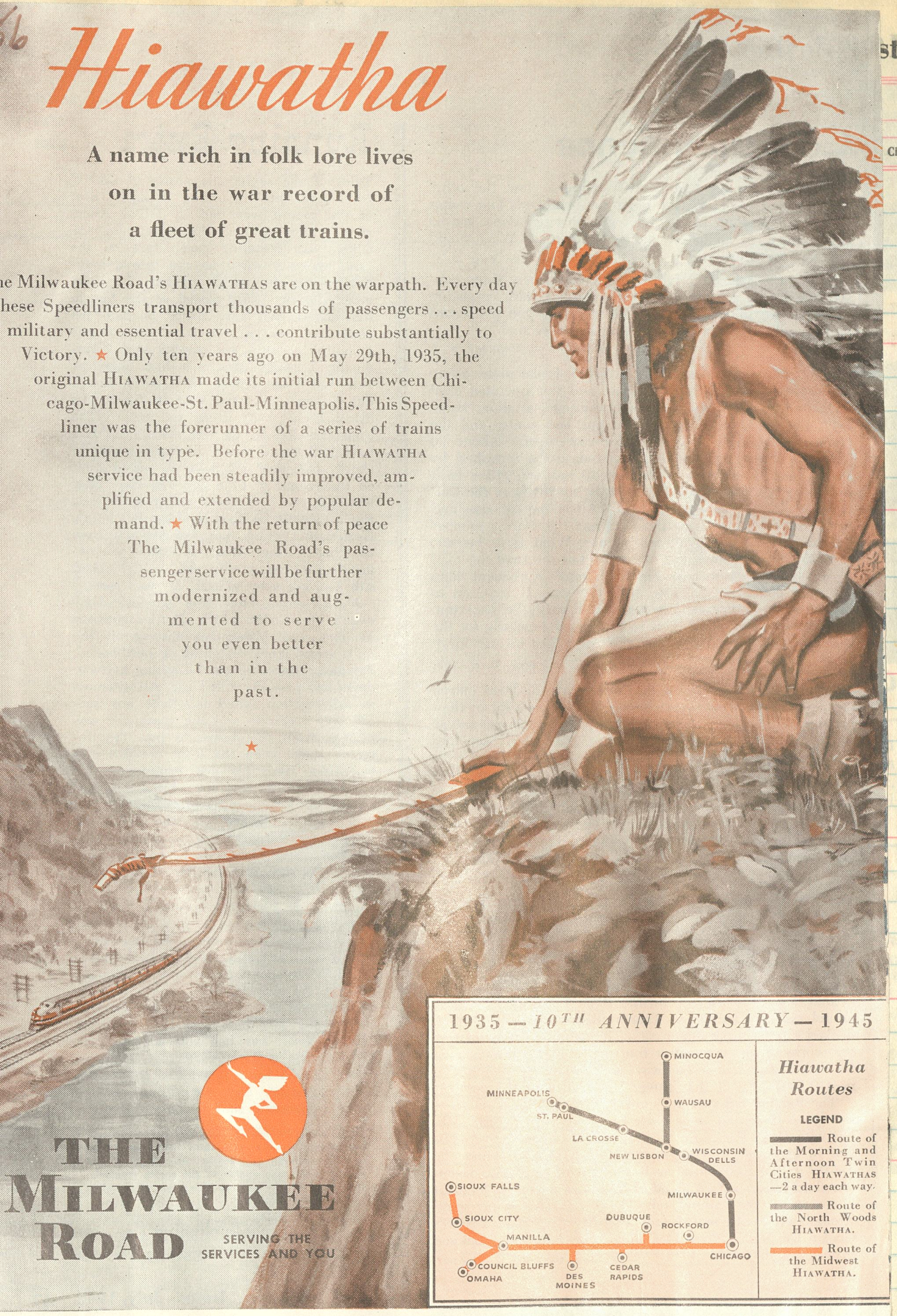
| THE HIAWATHA ATLANTICS<br>Class A | | | | | | |
|---|---|---|---|---|---|---|
| Cyls 19x28 Dvs 84" BP 300# TE 30685 | | | | | | |
| #1 | Schenectady | 68684 | May 1935 | Retired | Nov | 1951 |
| #2 | Schenectady | 68685 | May 1935 | Retired | Nov | 1951 |
| #3 | Schenectady | 68729 | May 1936 | Retired | Sep | 1949 |
| #4 | Schenectady | 68828 | Apr 1937 | Retired | Jun | 1951 |



Earl Ruhland.

The original six-car Hiawathas became longer trains as more cars were added to take care of the passengers the streamliners brought to the Milwaukee. Two more class A's were built: No. 3 (shown at Wauwatosa, Wis.) in 1936, No. 4 in 1937. In 1938 the A's yielded to F-7 4-6-4's.

66


Hiawatha
THE MILWAUKEE ROAD
SERVING THE SERVICES AND YOU
1935 — 10TH ANNIVERSARY — 1945
MINOCQUA
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WAUSAU
ST. PAUL
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WISCONSIN DELLS
SIOUX FALLS
MILWAUKEE
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DUBUQUE
ROCKFORD
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CHICAGO
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OMAHA
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Hiawatha Routes
LEGEND

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he Milwaukee Road's HIAWATHAS are on the warpath. Every day hese Speedliners transport thousands of passengers . . . speed military and essential travel . . . contribute substantially to Victory. ★ Only ten years ago on May 29th, 1935, the original HIAWATHA made its initial run between Chicago-Milwaukee-St. Paul-Minneapolis. This Speedliner was the forerunner of a series of trains unique in type. Before the war HIAWATHA service had been steadily improved, amplified and extended by popular demand. ★ With the return of peace The Milwaukee Road's passenger service will be further modernized and augmented to serve you even better than in the past.

★

▬ Route of the Morning and Afternoon Twin Cities HIAWATHAS—2 a day each way.

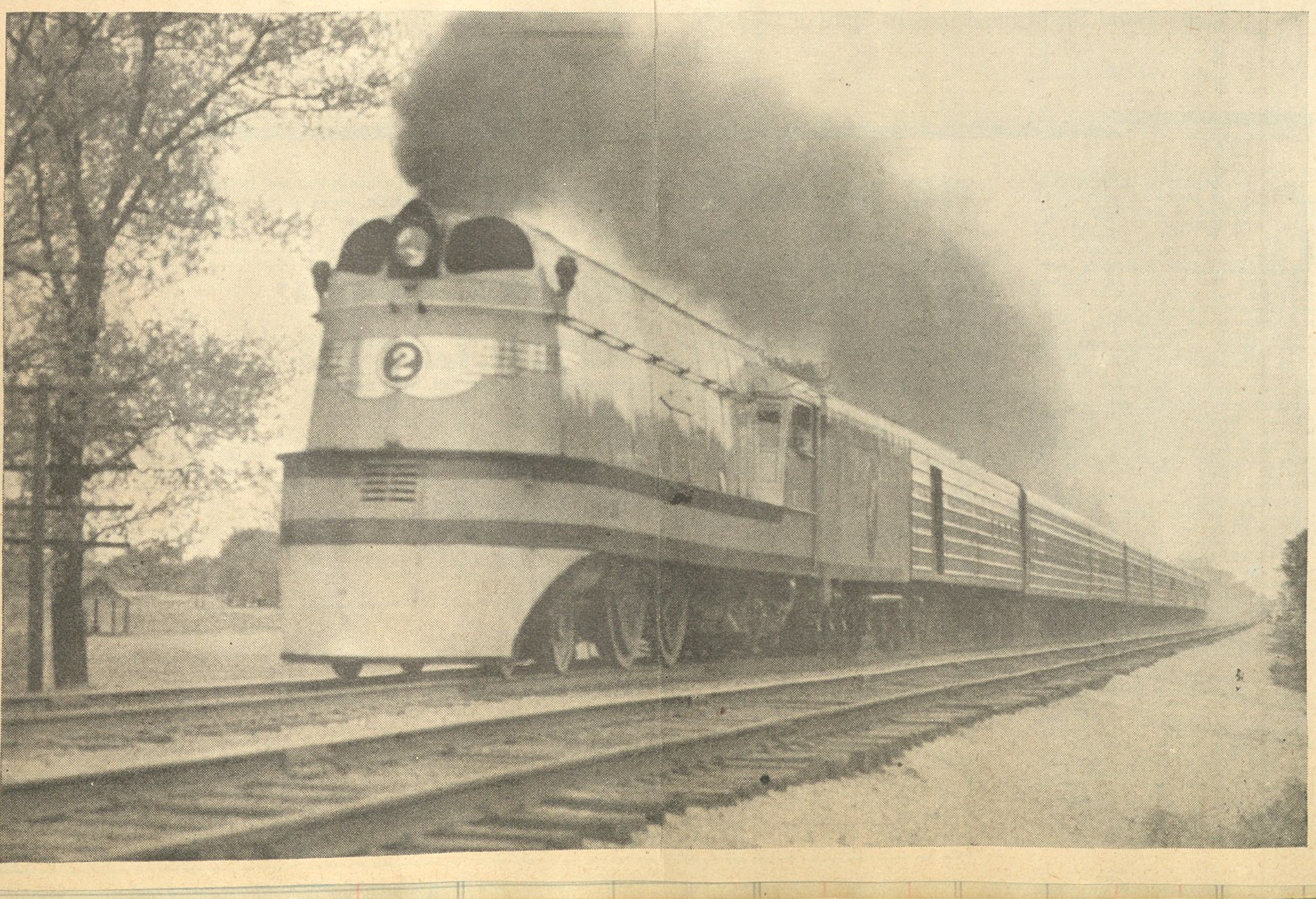
▬ Route of the North Woods HIAWATHA.

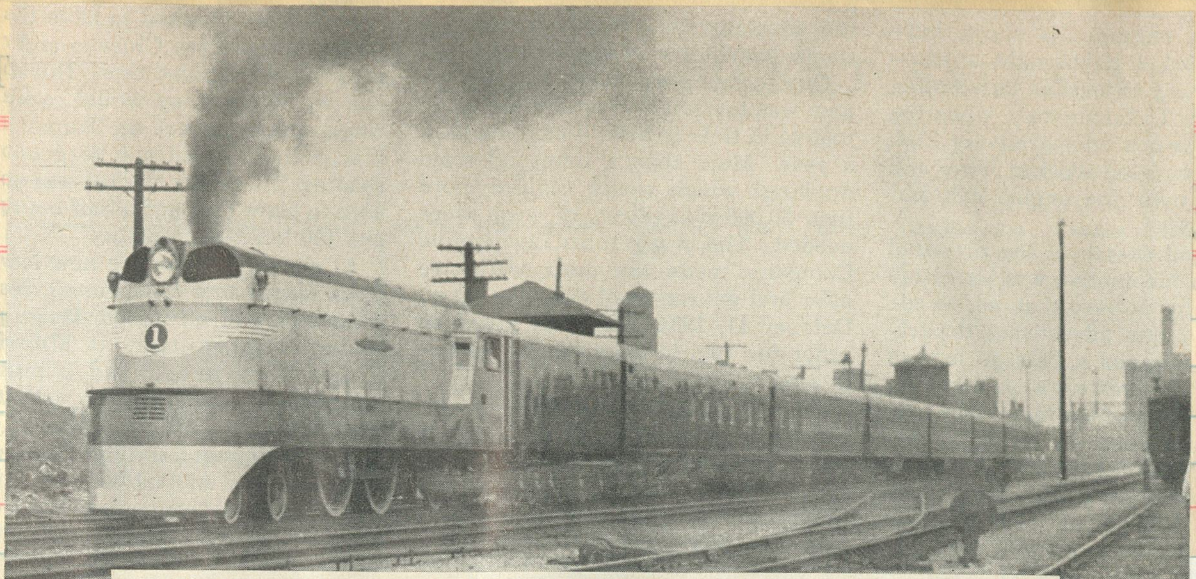
▬ Route of the Midwest HIAWATHA.

THE HIAWATHA ATLANTICS
Class A

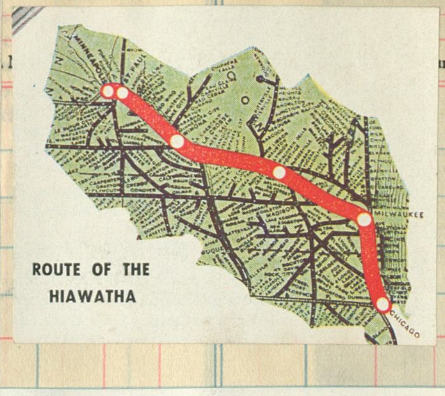
Cyls 19x28 Dvs 84" BP 300# TE 30685

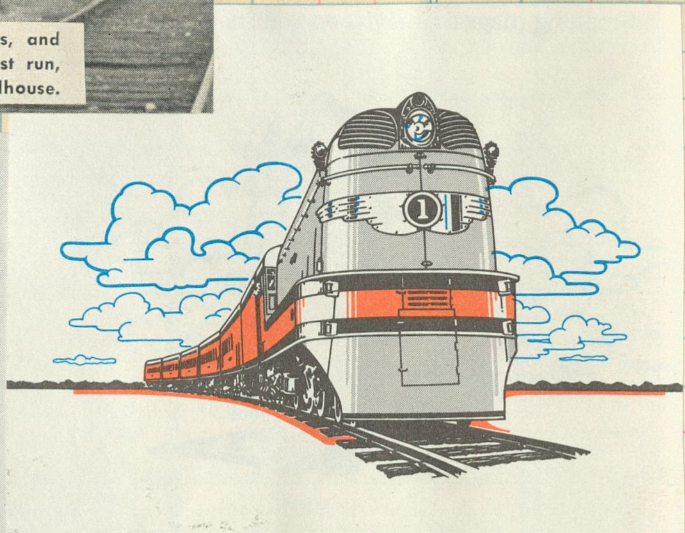
| | | | | | | |
|---|---|---|---|---|---|---|
| #1 | Schenectady | 68684 | May 1935 | Retired | Nov 1951 |
| #2 | Schenectady | 68685 | May 1935 | Retired | Nov 1951 |
| #3 | Schenectady | 68729 | May 1936 | Retired | Sep 1949 |
| #4 | Schenectady | 68828 | Apr 1937 | Retired | Jun 1951 |

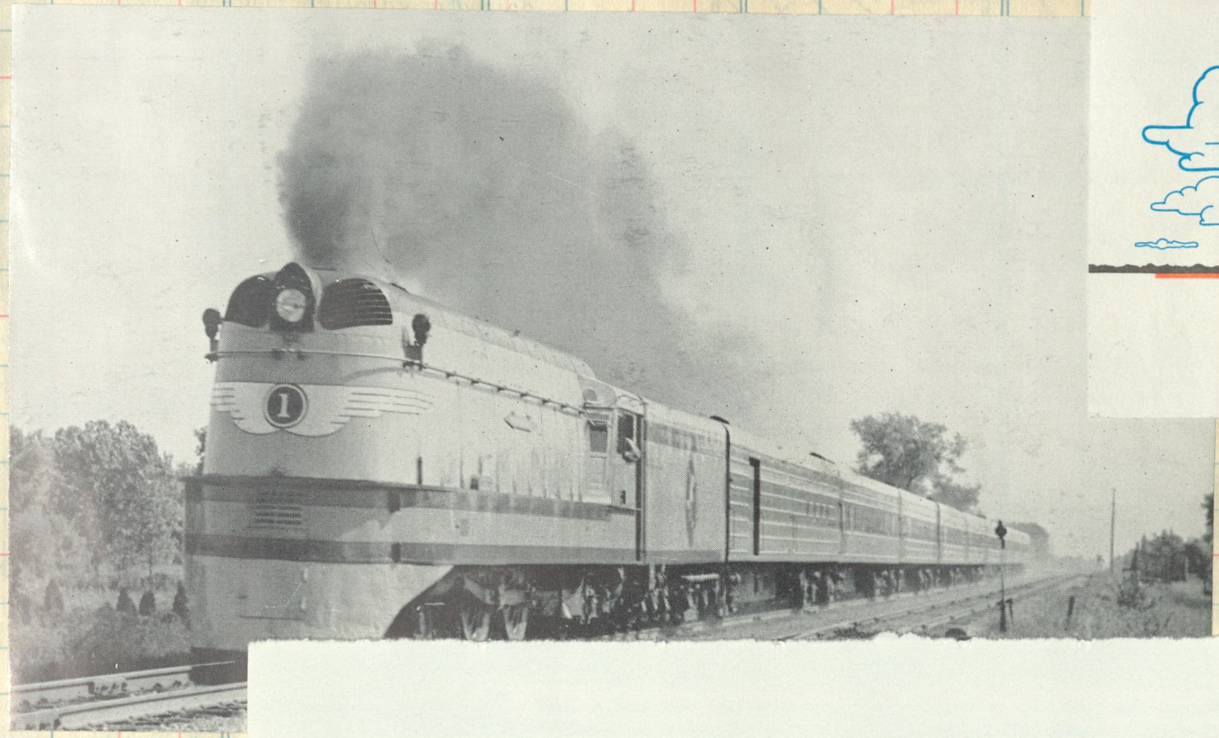


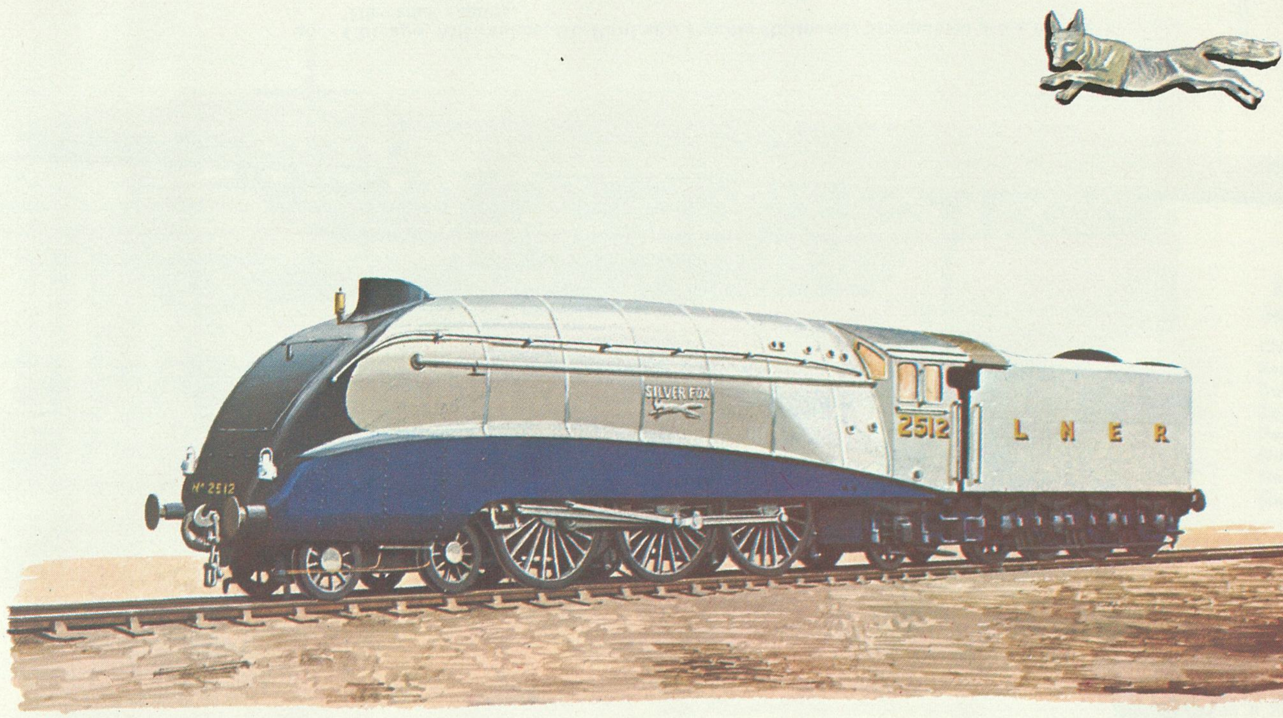


The first Hiawatha steamed out of Chicago's Union Station, sped through the suburbs, and raced fleetfooted to the Twin Cities on May 29, 1935. Here is the streamliner on its first run, powered by class A 4-4-2 No. 1, as it passed the Western Avenue coach yard and roundhouse.


ROUTE OF THE HIAWATHA

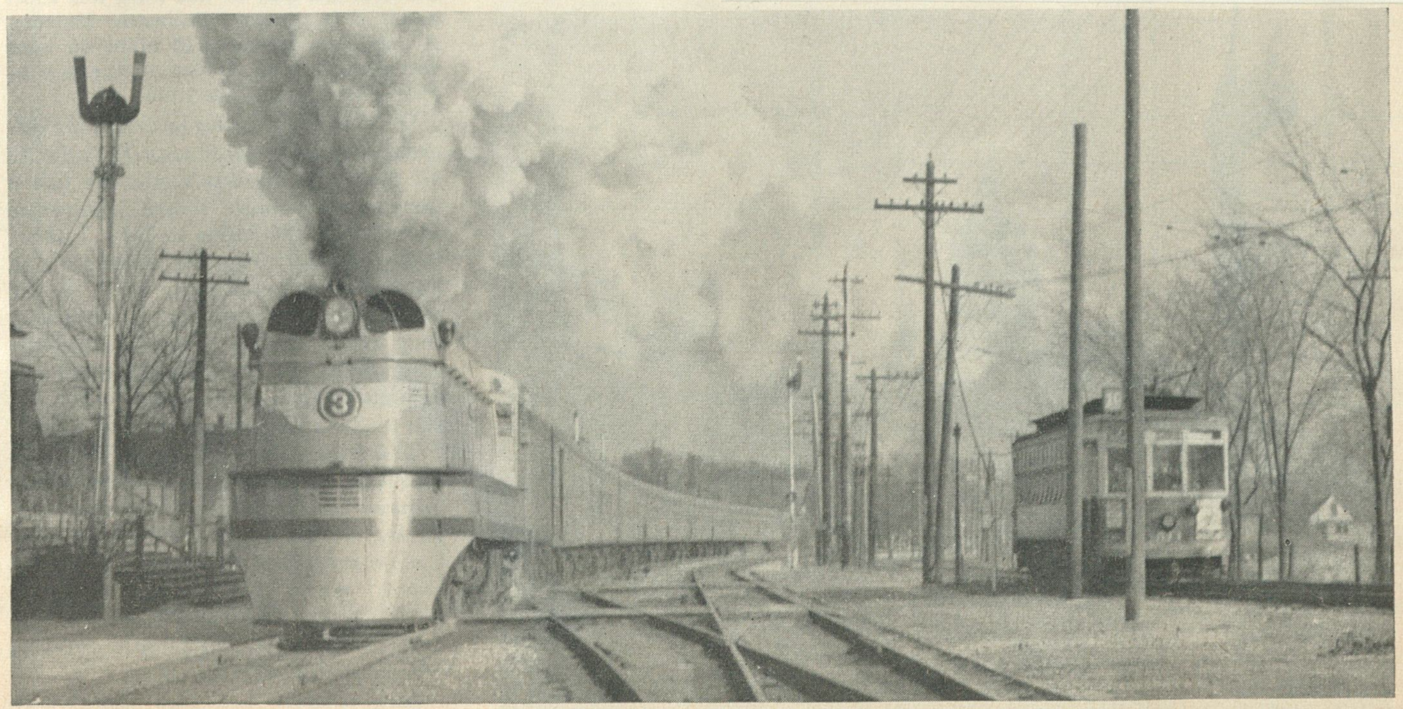





SILVER FOX
2512
L N E R
No 2512

45. **London and North Eastern Railway:** the record holding 'A4' class streamlined Pacific.

photos like this and the one on the cover by sticking close to stations and yards.



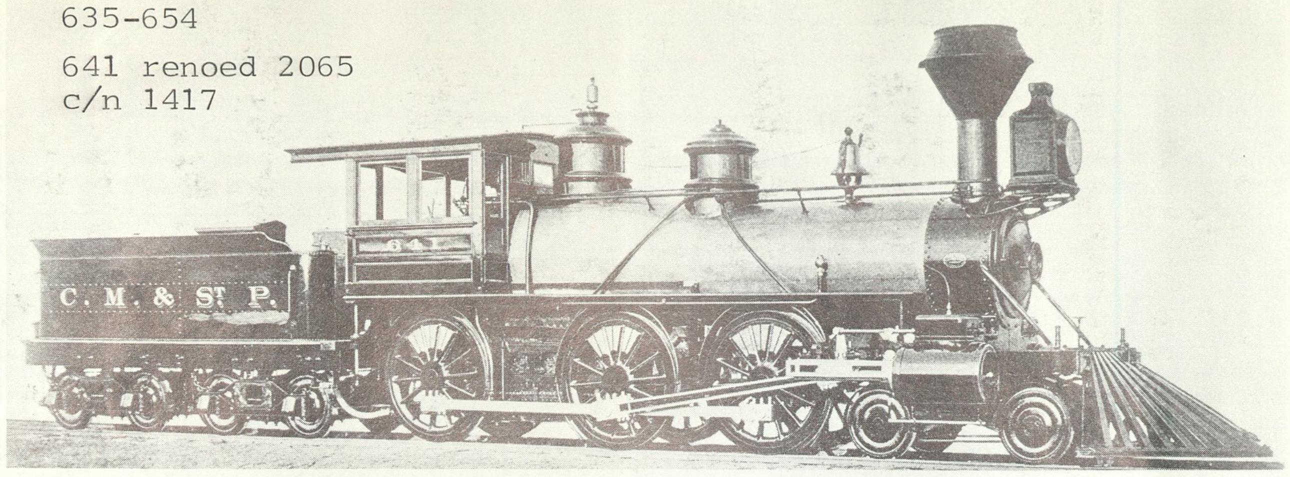
Earl Ruhland.

The original six-car Hiawathas became longer trains as more cars were added to take care of the passengers the streamliners brought to the Milwaukee. Two more class A's were built: No. 3 (shown at Wauwatosa, Wis.) in 1936, No. 4 in 1937. In 1938 the A's yielded to F-7 4-6-4's.

SELLER
DATE
FORM
DESTINATION

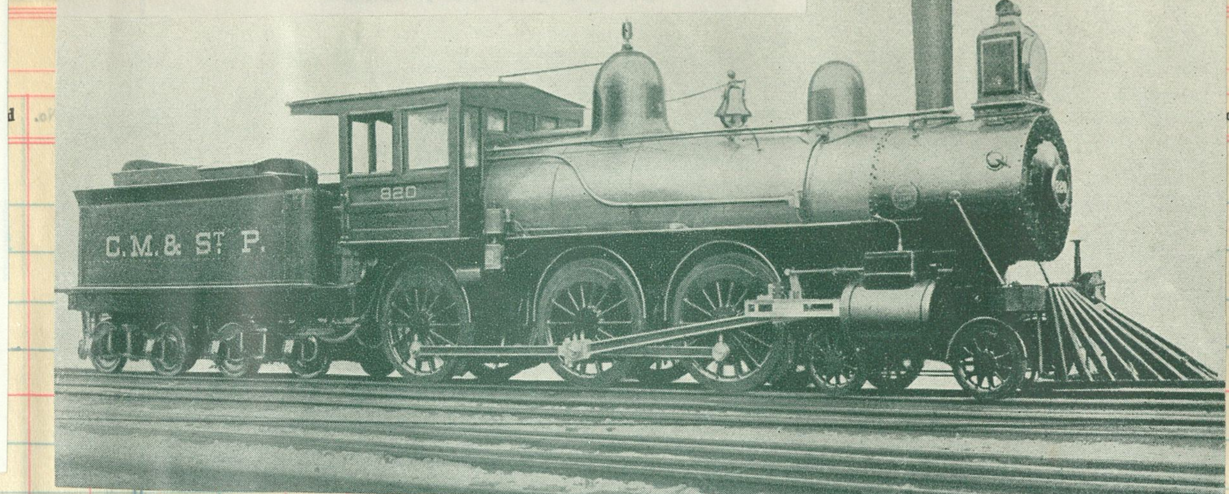
o. Sold Amount

635-654
641 renoed 2065
c/n 1417

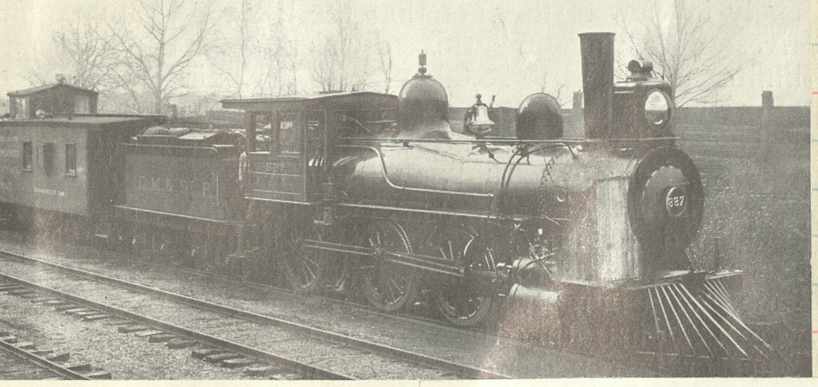


*The Rhode Island Locomotive Works completed the 641 in 1883.*

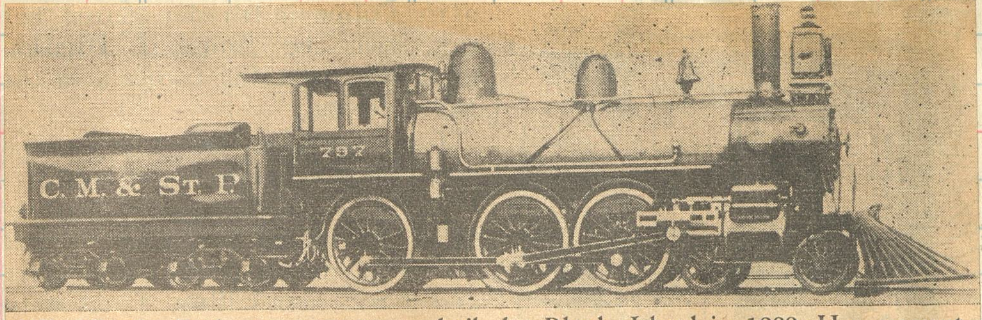
#820 Baldwin 1891 c/n 12386
Renoed 183, 2231



Baldwin c/n 12419



st Vauclain Compound Locomotive Built f
the Dynamomet

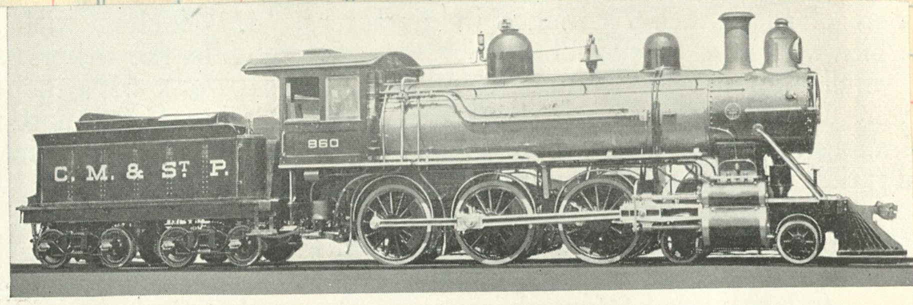


HEAVY St. Paul passenger power built by Rhode Island in 1889. Her crescent-shaped counterweights were an innovation

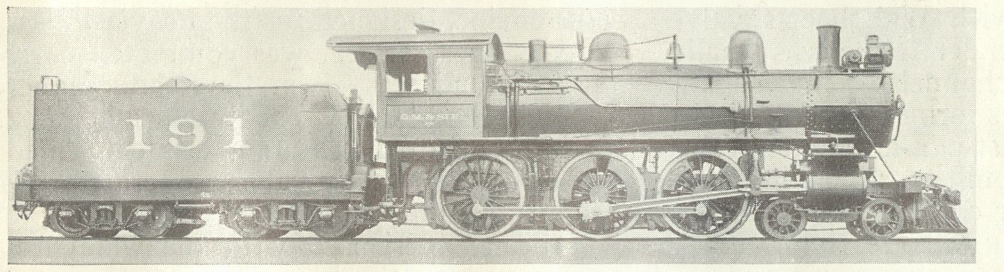
c/n 15895

| | |
|---|---|
| Cylinders | 13½″ & 23″ x 26″ |
| Drivers, diam. | 62″ |
| Steam pressure | 200 lb. |
| Grate area | 30.1 sq. ft. |
| Heating surface | 2209 sq. ft. |
| Weight on drivers | 106,200 lb. |
| " total engine | 149,600 lb. |
| Tractive force (compound) | 21,300 lb. |

846-870



**Compound Ten-wheeled Locomotive, Built by The Baldwin Locomotive Works, 1897**

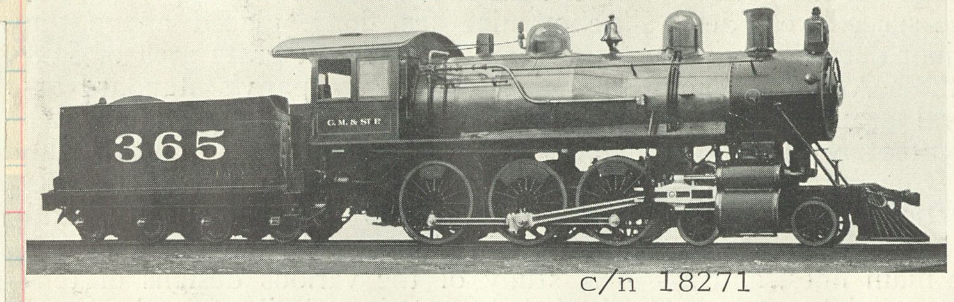


**Ten-wheeled Locomotive, Class G6-as, Built at the Milwaukee Shops, 1905**

| | |
|---|---|
| Cylinders | 20½″ x 26″ |
| Drivers, diam. | 73″ |
| Steam pressure | 200 lb. |
| Grate area | 30.6 sq. ft. |
| Water heating surface | 1786 sq. ft. |
| Superheating surface | 565 sq. ft. |
| Weight on drivers | 135,700 lb. |
| " total engine | 182,100 lb. |
| Tractive force | 25,450 lb. |

Originally built to use saturated steam.

Renoed 2300



c/n 18271

**Compound Ten-wheeled Locomotive, Built by The Baldwin Locomotive Works, 1900**

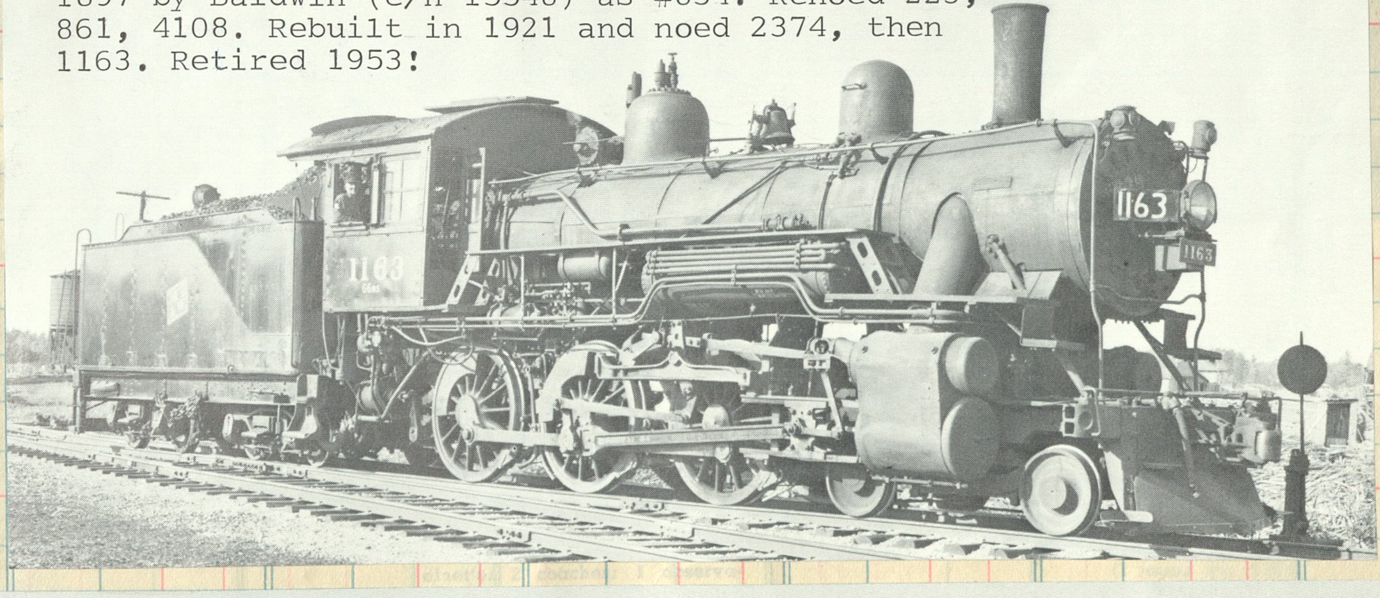
| | |
|---|---|
| Cylinders | 15″ & 25″ x 30″ |
| Drivers, diam. | 68″ |
| Steam pressure | 200 lb. |
| Grate area | 35.1 sq. ft. |
| Heating surface | 2952 sq. ft. |
| Weight on drivers | 135,600 lb. |
| " total engine | 178,900 lb. |
| Tractive force (compound) | 27,000 lb. |

351-366

01-325 Class B-3 Vauclain compound Baldwin 1900

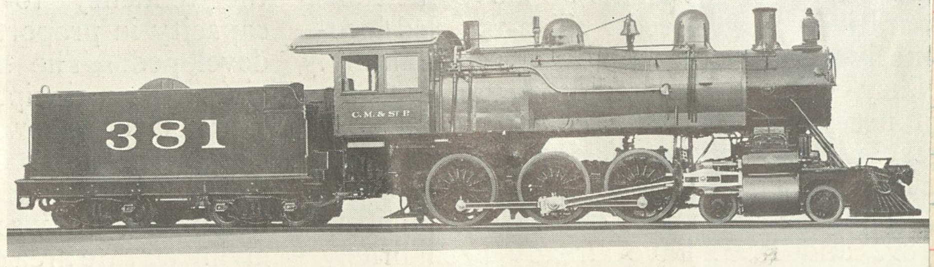
/n 18071 Reblt Feby 1921 and renoed 2761

This old veteran had seen a lot of hoggers come and go. Built in 1897 by Baldwin (c/n 15548) as #854. Renoed 223, 861, 4108. Rebuilt in 1921 and noed 2374, then 1163. Retired 1953!

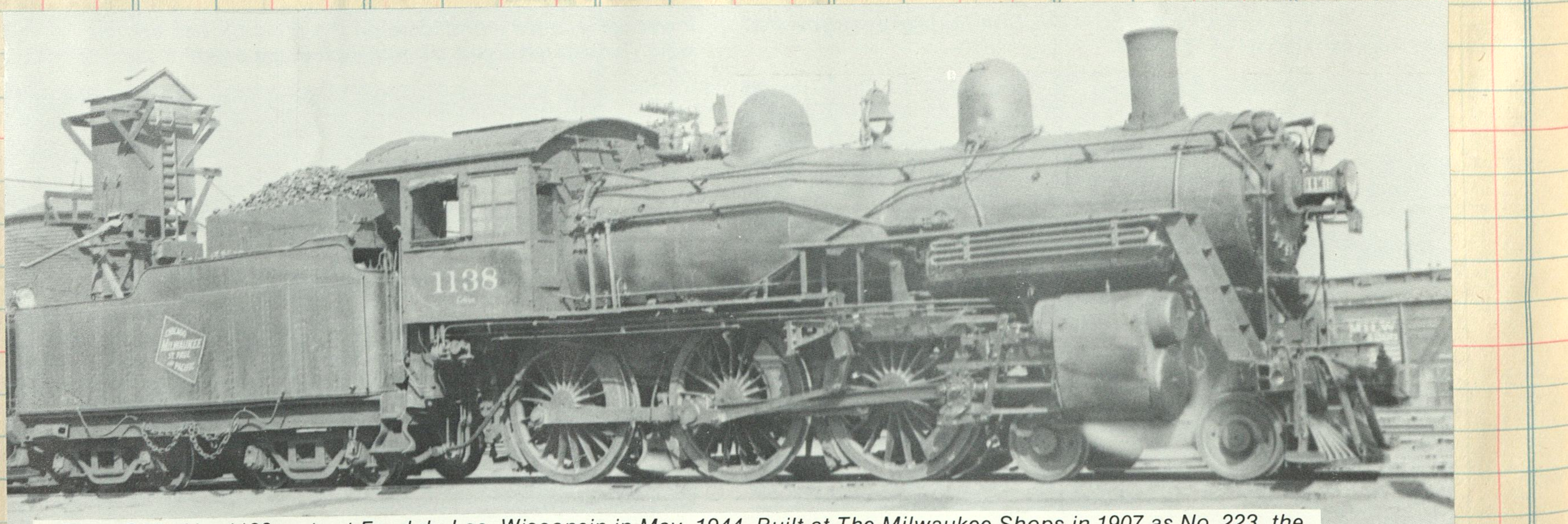


| | |
|---|---|
| ers | 15″ & 25″ x 28″ |
| s, diam. | 62″ |
| pressure | 200 lb. |
| area | 46.5 sq. ft. |
| g surface | 2903 sq. ft. |
| t on drivers | 126,500 lb. |
| total engine | 176,200 lb. |
| ve force (compound) | 27,700 lb. |

c/n 19509

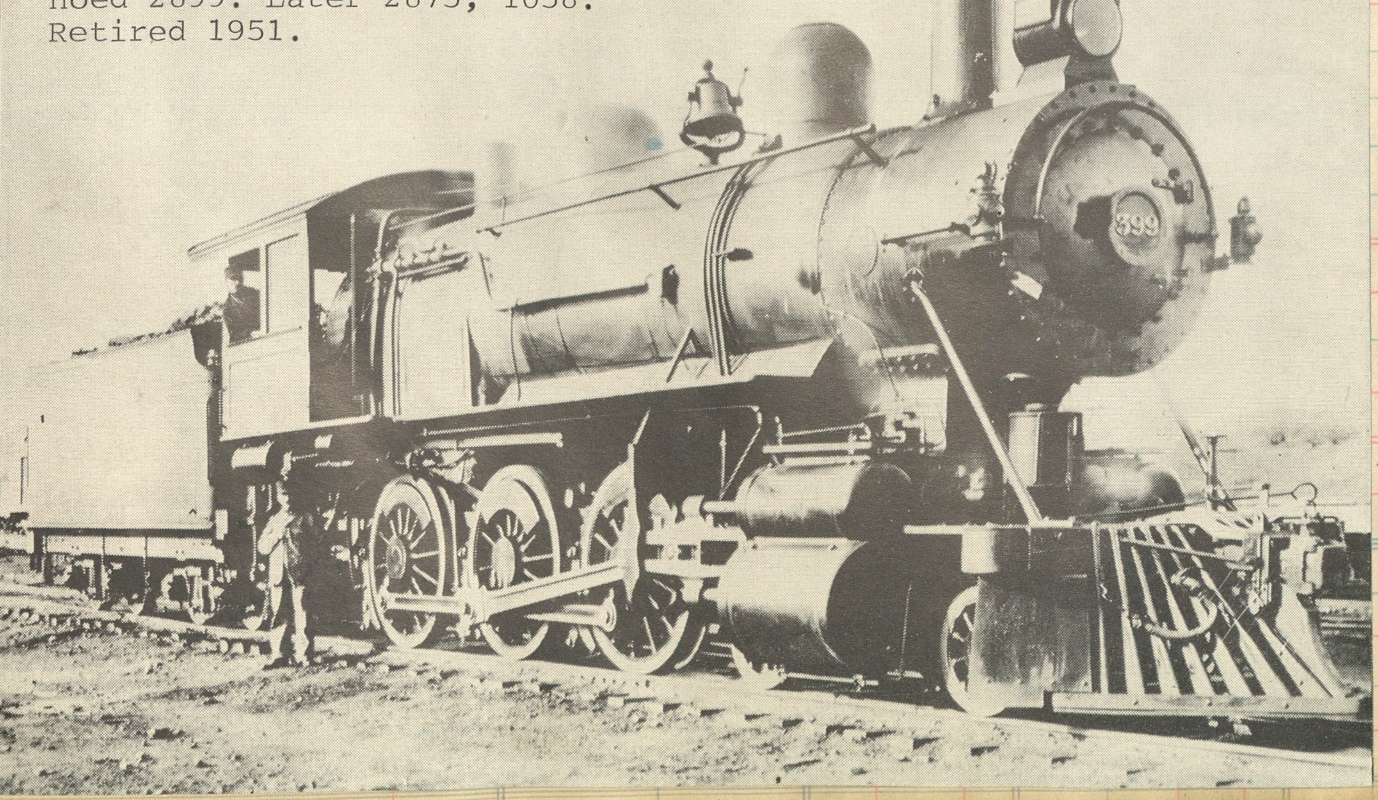


**Compound Ten-wheeled Locomotive with Wide Firebox, Built by The Baldwin Locomotive Works, 1901**



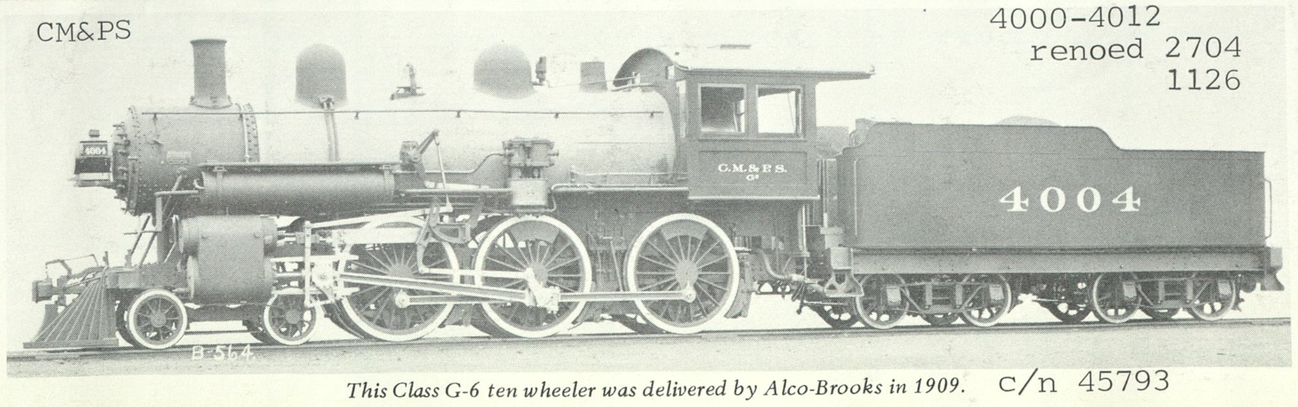
*Class G6bs No. 1138 rests at Fond du Lac, Wisconsin in May, 1944. Built at The Milwaukee Shops in 1907 as No. 223, the locomotive was renumbered to 2332 in 1919 and received the current number of 1939.*

The 399 was one of 34 engines (367-400) c/n 19600 constructed by Baldwin as Vauclain cmpds in 1901. Renoed 1749, 4349. Reblt simple Sept 1916 as class G-7bs and noed 2899. Later 2875, 1058. Retired 1951.

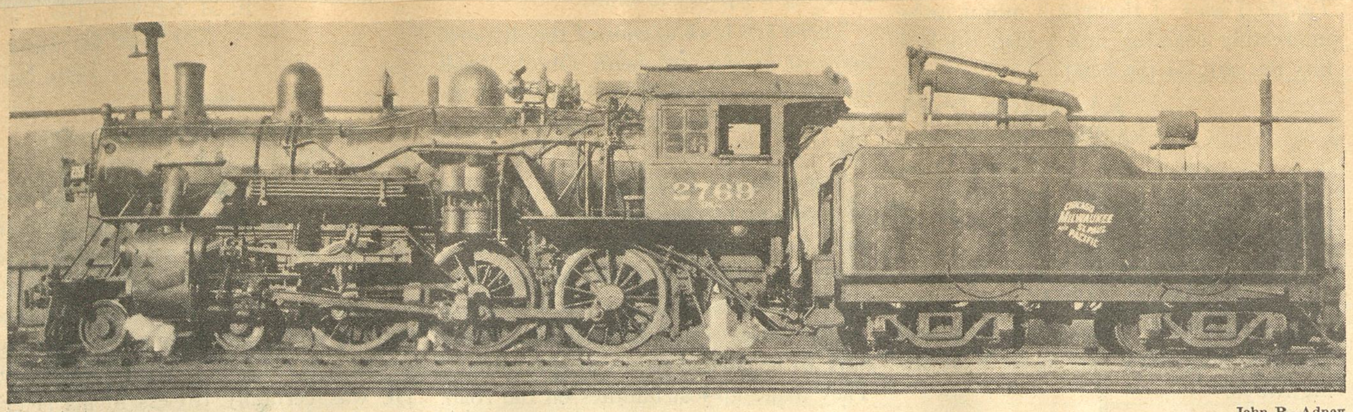


CM&PS

4000-4012
renoed 2704
1126



*This Class G-6 ten wheeler was delivered by Alco-Brooks in 1909.* c/n 45793

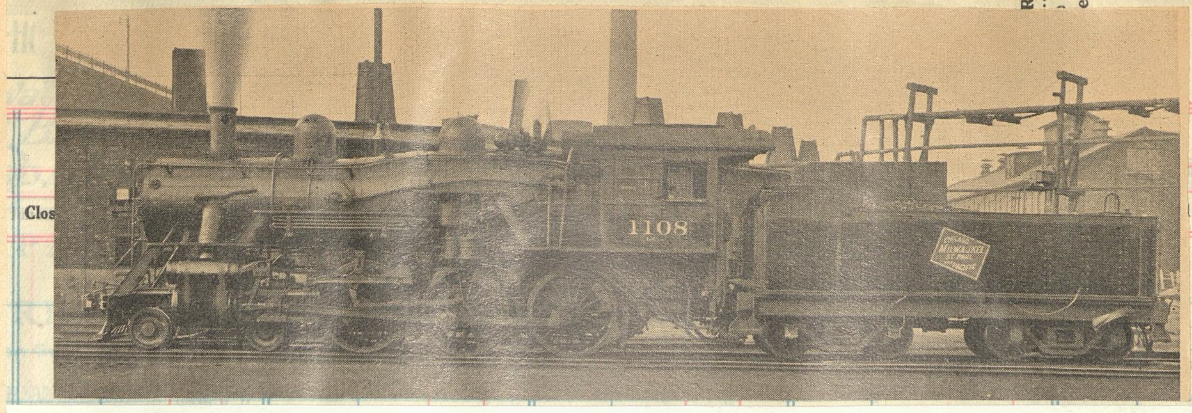


John R. Adney

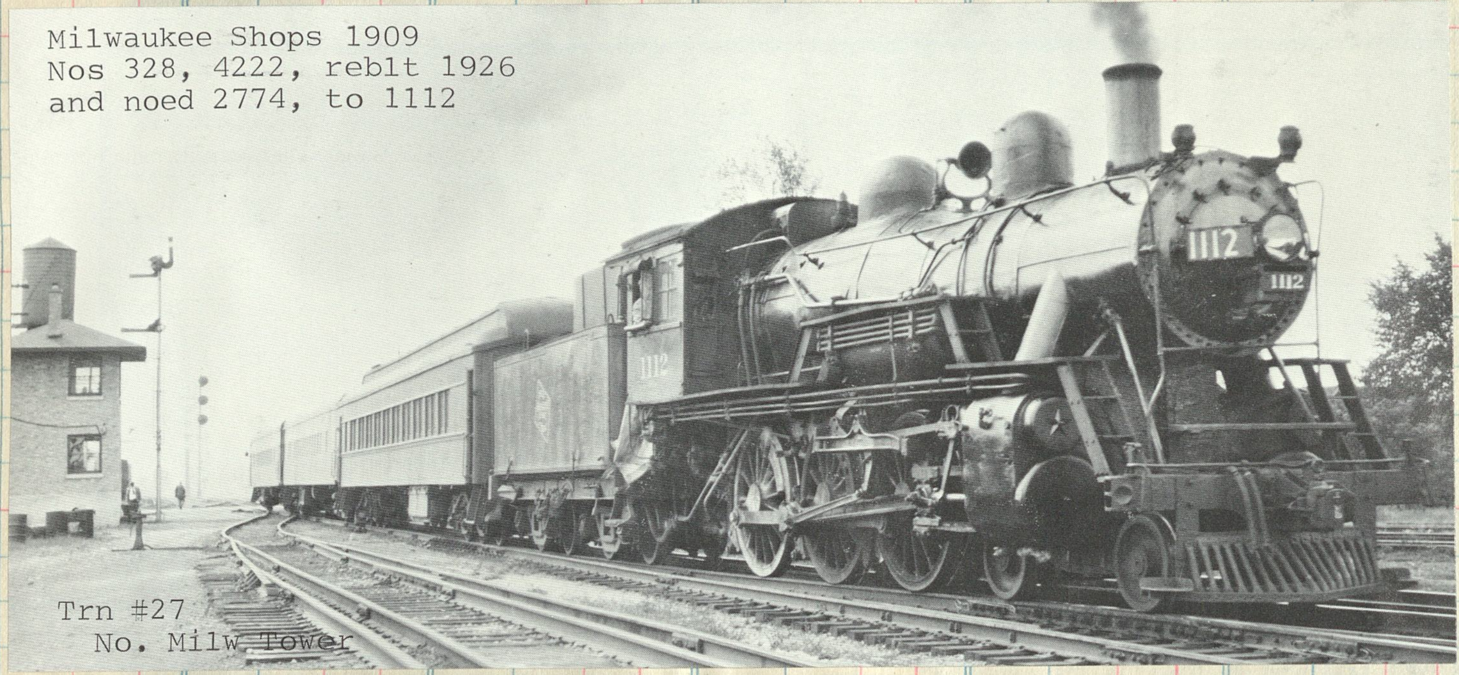
MILWAUKEE LOCOMOTIVE 2769 BEFORE IT WAS STREAMLINED

After the engine had been made into a streamliner at the Chicago, Milwaukee, St. Paul & Pacific shops, it was assigned to second section service on the Hiawatha, crack train. Cylinders are 22 by 26 inches; diameter of drivers, 69 inches; boiler pressure, 200 pounds; weight of engine and tender, 322,100 pounds; tractive effort, 31,004 pounds.

#2769, one of the twenty five 10 wheelers (Noed 306-330) built at the Milwaukee Shops in 1909. Org #317, then 4211,2811. Reblt 1926 and noed 2769. Streamlined in 1937 for "Midwest Hiawatha" service and noed (2nd) #10. Later renoed as 1111. Retired 1947.

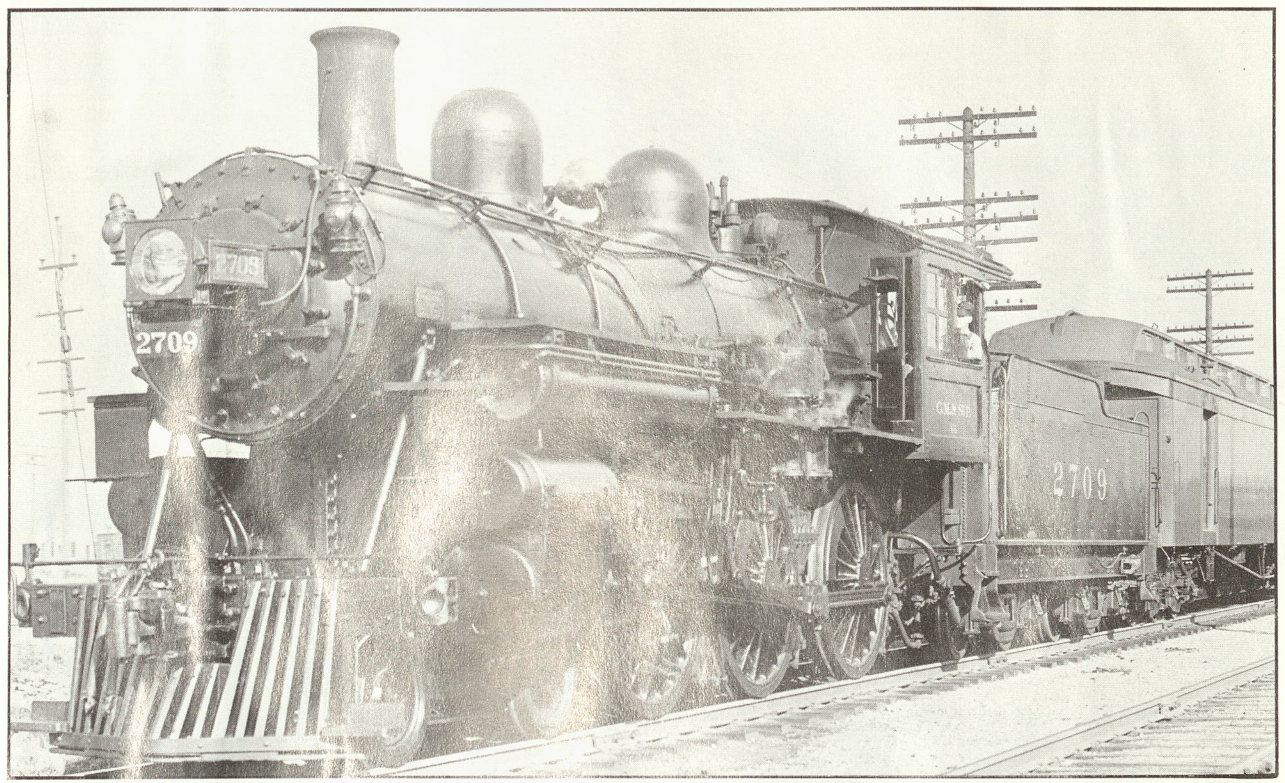


Blt at Milwaukee Shops 1909 as #322. Renoed 4216, 2816. Reblt in 1927 and noed 2770, then 1108.



Milwaukee Shops 1909
Nos 328, 4222, reblt 1926
and noed 2774, to 1112

Trn #27
No. Milw Tower

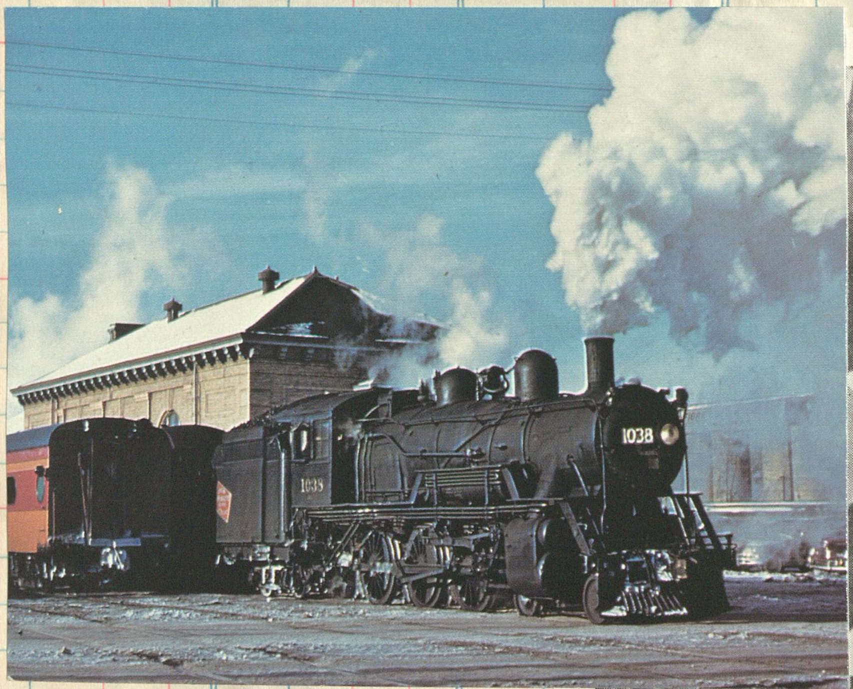


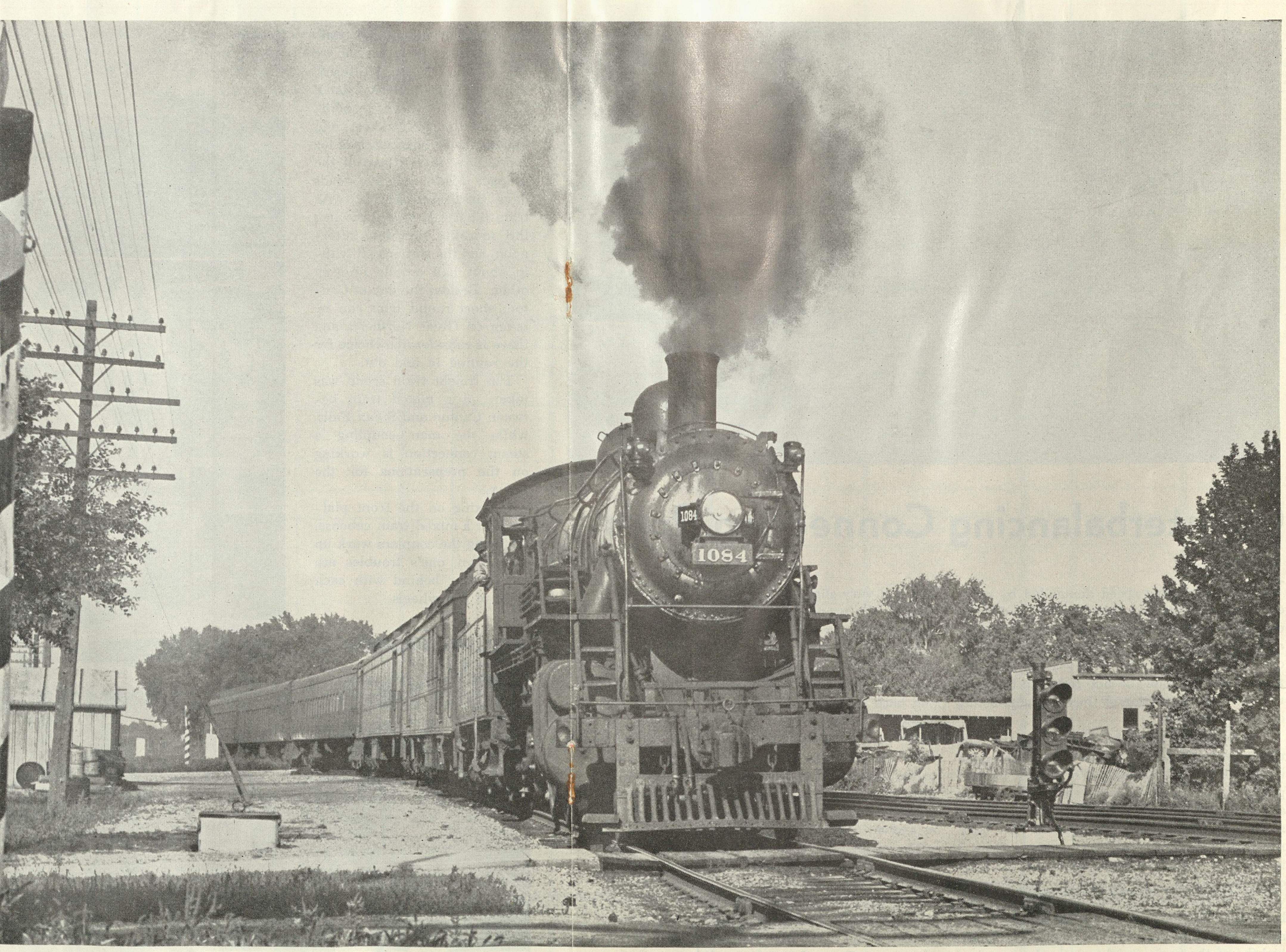
James A. Turner

Chicago Milwaukee & St. Paul #2709 on train #1, the "National Park Limited" waiting for clearance at Argo Crossing on July 22, 1924. The train had left Union Station at 7:30 a.m. and arrived at Argo 10 minutes later. It was scheduled to arrive at Ashford at 10:45. It returned to Seattle at 7:15 p.m.

Brooks c/n 45798 1909
Org Nos 4000-4012, renoed
2700-2712 in 1912

Note the perfect focus and sharpness in this foto ... Another of the excellent prints from Jim Turner

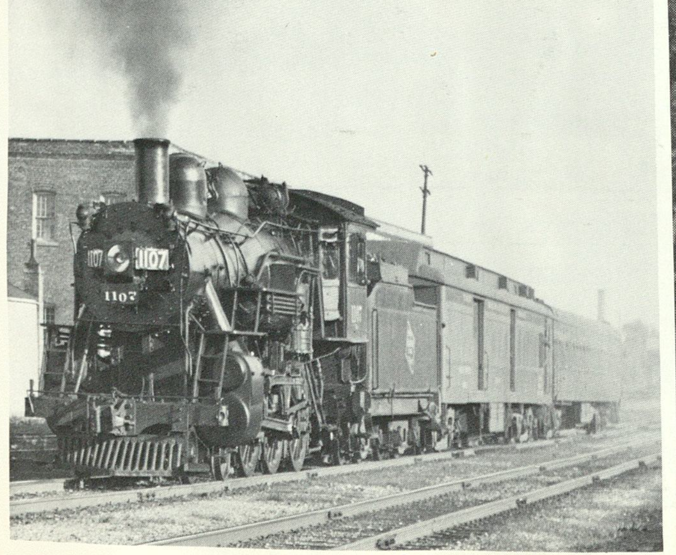




Baldwin 1900 c/n 18271
Nos 365, 1715, 4315. Reblt
1921 noed 2865, 1084

From Rapid City and the Black Hills of South Dakota, Milwaukee Road No. 2 comes through the electric switches at the west end of the Canton, S. D., station to make connections with the Midwest Hiawatha for Chicago.

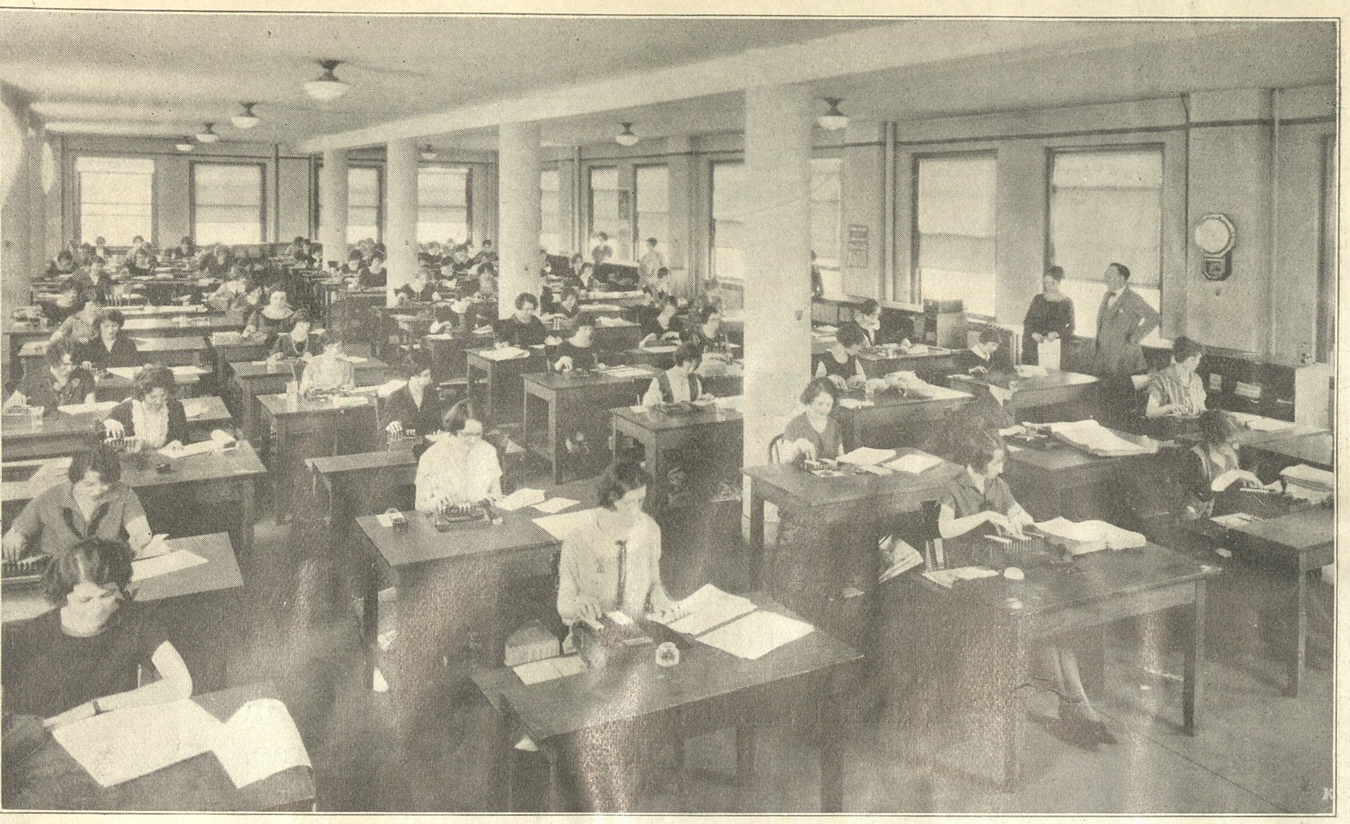
Milwaukee Shops
1909



Jim Scribbins/collection of Art Harnack

*The late afternoon sun highlights No. 35, the Milwaukee-Berlin daily accommodation, powered by a very clean 4-6-0 No. 1107 going upgrade just north of North Avenue in Milwaukee in June, 1946.*

60



Comptometer Bureau in General Accounting Offices of C. M. & St. P. R. R., Chicago.

# A New Method of Handling Railroad Computing Work

Up to October, 1924, all computing work of the reight Auditor, Ticket Auditor, Car Accountant and uditor of Expenditures and Statistics of the Chicago & Milaukee & St. Paul Railroad, Chicago, was handled separately y a group of Comptometer operators in each departmental ffice.

Then, as a part of the Company's program of rigid conomy and greater efficiency, Mr. W. W. K. parrow, Chief Financial and Accounting Officer, consolidated he computing work of all these departments into one Central omputing Bureau.

The success of the Central Bureau plan has been lefinitely proved by the important payroll saving ffected and the large increase in volume of work turned out, n this, the first complete consolidation of computing work ver made by any railroad.

Summarized, the results of this Central Comptometer Bureau during the year and a half it has been n operation are:

. A LARGE DIRECT PAYROLL SAVING
amounting to many thousands of dollars a year.

. A HIGHER STANDARD OF OPERATOR EFFICIENCY
This is possible because instead of knowing just one line of work each operator becomes experienced in all kinds of calculations.

3. COMPLETE ELIMINATION OF DEPARTMENTAL PEAK LOADS
By throwing all work from the five major offices into the Central Bureau, the expense and annoyance of peak loads has been eliminated.

4. CONTROL OF WORK BY DAILY SCHEDULE
All Comptometer work coming from the various departments is scheduled by days and goes thru as scheduled in current work.

5. FLEXIBILITY OF PRODUCTION
By swinging part or all the 88 Bureau operators onto special or rush work it is easily finished in short order.

6. PLAN ENDORSED BY DEPARTMENT HEADS AND OPERATORS
The advantages of the Central Comptometer Bureau plan are appreciated and endorsed by both department heads and operators.

While the 88 Comptometers, comprising the Central Computing Bureau is the largest single battery of the C. M. & St. P. System, there are beside these 226 more Comptometers used in the offices of:

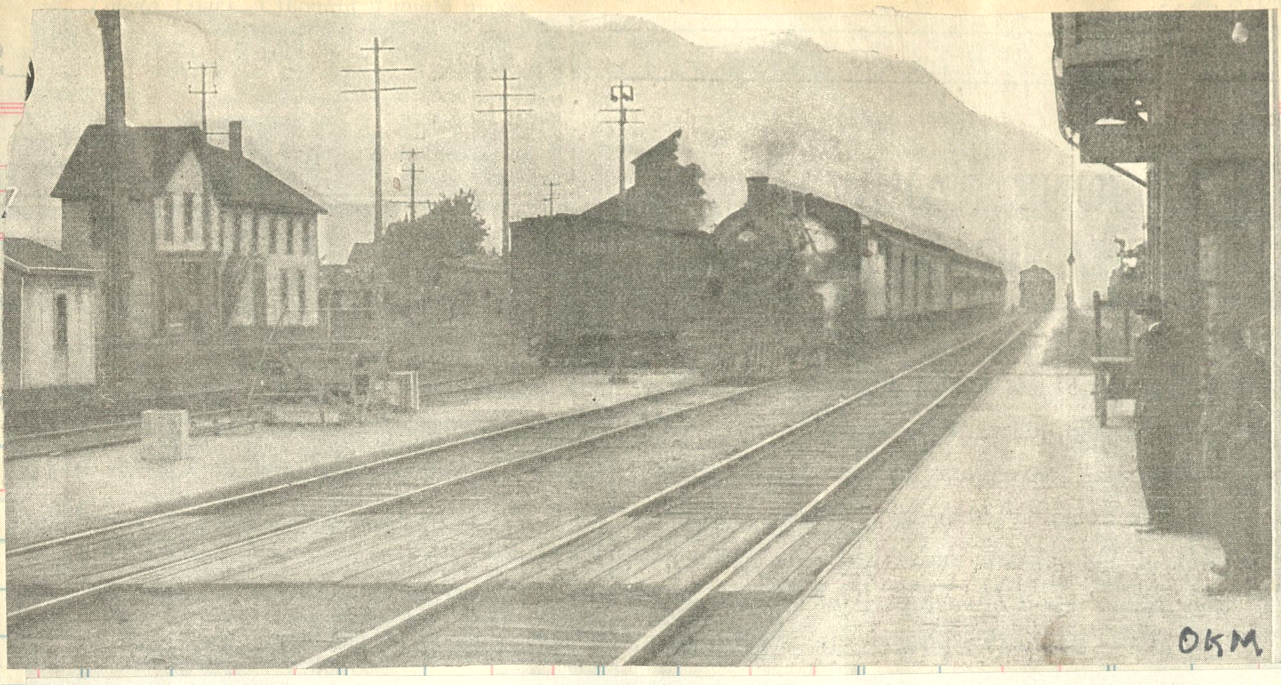
LOCAL FREIGHT—on Original Extension and Verification Waybills.
DIVISION SUPERINTENDENTS—on Payroll.
DIVISION ACCOUNTANTS—on Payroll, Distribution and Workmen's Compensation.
STOREKEEPER—on Material Requisitions, Inventory.

**FELT & TARRANT MFG. CO; 1733 N. PAULINA ST; CHICAGO, ILLINOIS**

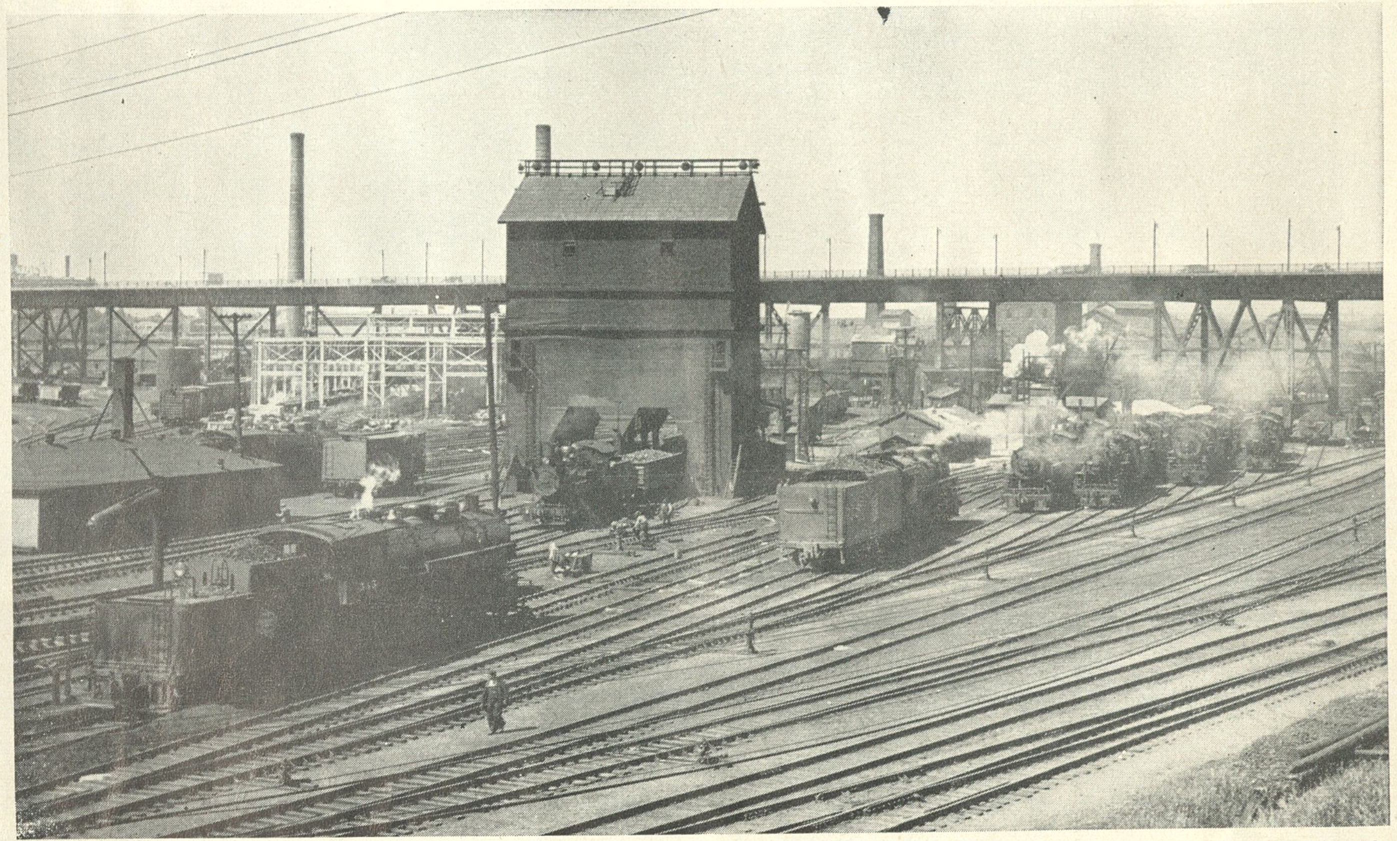
*If not made by Felt & Tarrant it's not a Comptometer*

**CONTROLLED KEY**
**Comptometer**
REG. TRADE MARK
**ADDING AND CALCULATING MACHINE**

*Only the Comptometer has the Controlled-key safeguard*

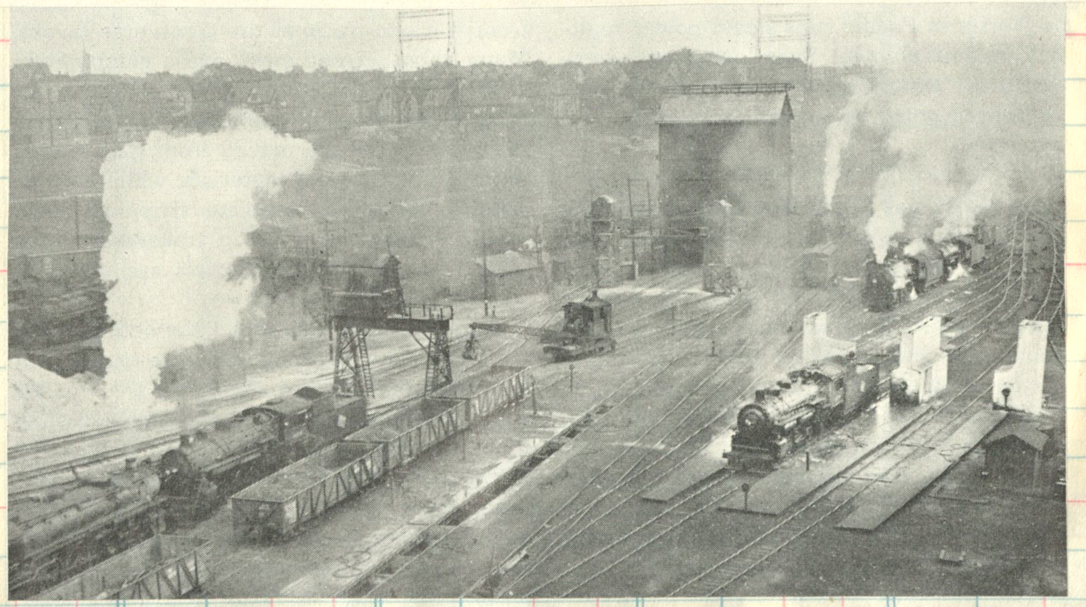


OKM

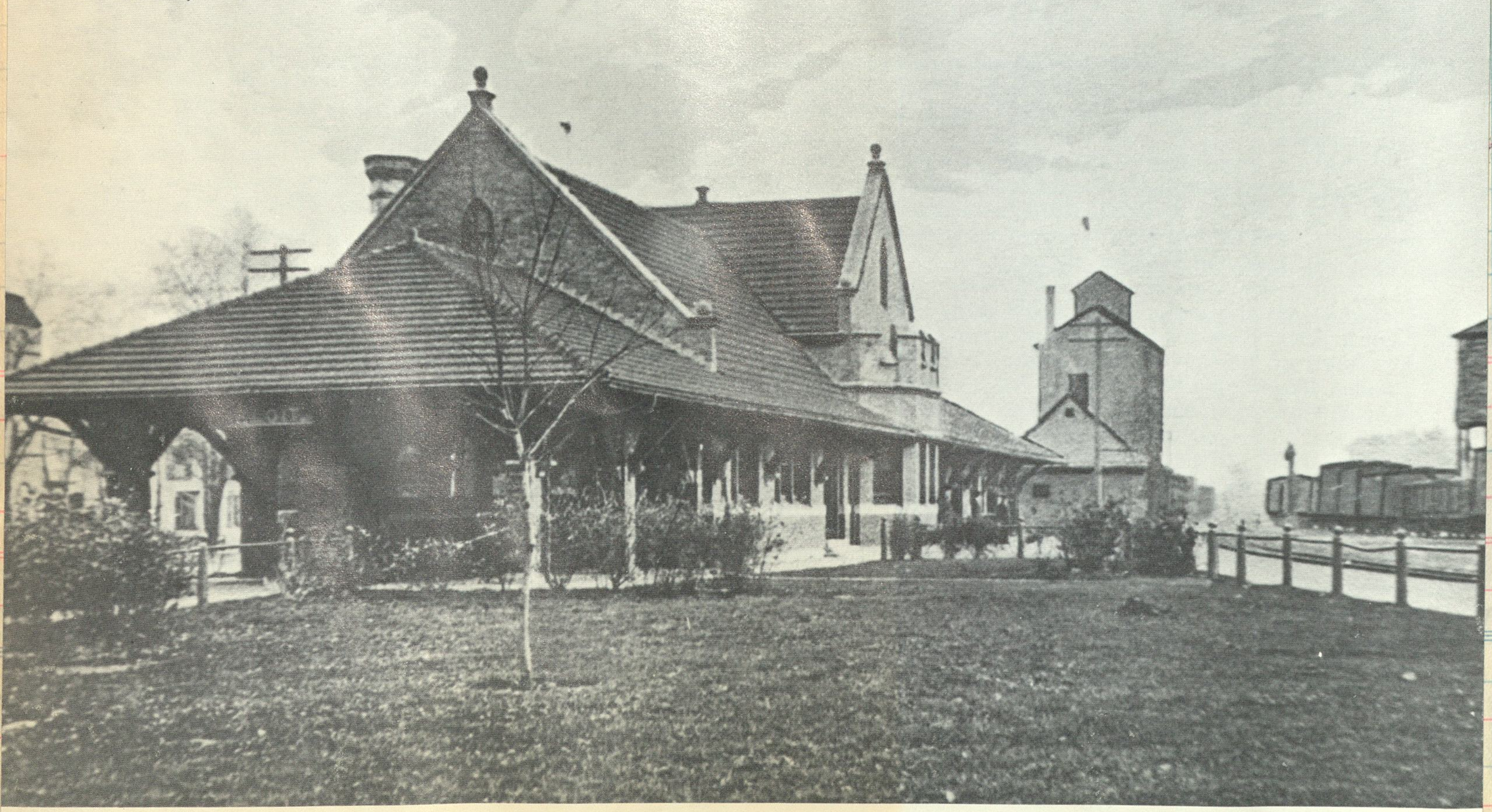


A. C. Kalmbach.

↗Motive power nerve center of the Milwaukee Road in Wisconsin is the Milwaukee engine terminal, where streamlined 4-6-4's and six-coupled shifters congregate for routine servicing and major repairs. The steel framework to the left of the coaling tower is the now-finished diesel shop; the viaduct carries the traffic of 35th Street. In the background are two roundhouses and the car shops. Also note here the Soo Line Mountain.

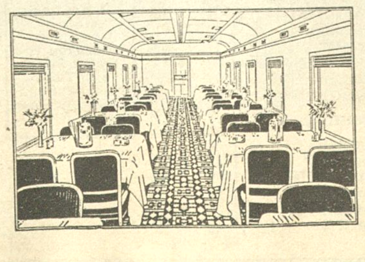


BELOIT, WIS.



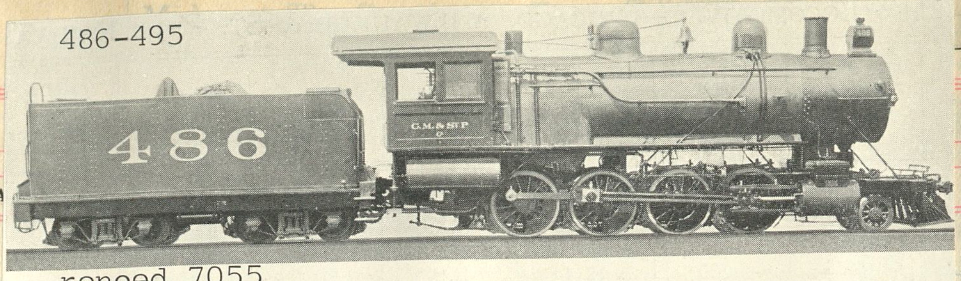
Collection of W. O'Gara

*This postcard view of Beloit looking east shows the fine landscaping commonly done at stations at the turn of the century.*



**Good Things to Eat!**
World renowned Milwaukee Road dining car service presents for your enjoyment tasty foods, expertly prepared, faultlessly served for as little as 50c.

486-495

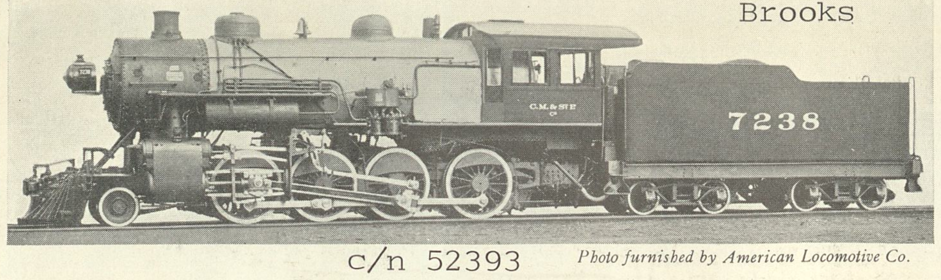


renoed 7055

Consolidation Type, Class C1-c, Built at the Milwaukee Shops, 1904

| | |
|---|---|
| Cylinders | 22" x 28" |
| Drivers, diam. | 56" |
| Steam pressure | 200 lb. |
| Grate area | 46.6 sq. ft. |
| Heating surface | 2608 sq. ft. |
| Weight on drivers | 156,400 lb. |
| " total engine | 177,000 lb. |
| Tractive force | 41,140 lb |

Brooks



c/n 52393

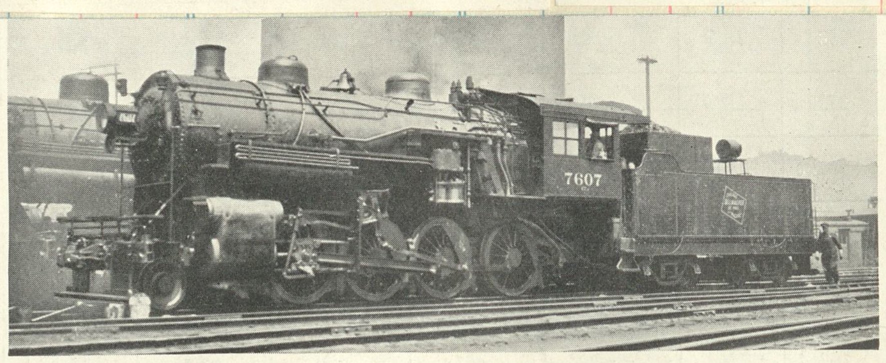
Photo furnished by American Locomotive Co.

Consolidation Type Locomotive, Class C5-a, Built by the American Locomotive Company, 1912

| | |
|---|---|
| Cylinders | 24" x 30" |
| Drivers, diam. | 63" |
| Steam pressure | 185 lb. |
| Grate area | 48.8 sq. ft. |
| Water heating surface | 2660 sq. ft. |
| Superheating surface | 652 sq. ft. |
| Weight on drivers | 197,500 lb. |
| " total engine | 224,000 lb. |
| Tractive force | 43,130 lb. |

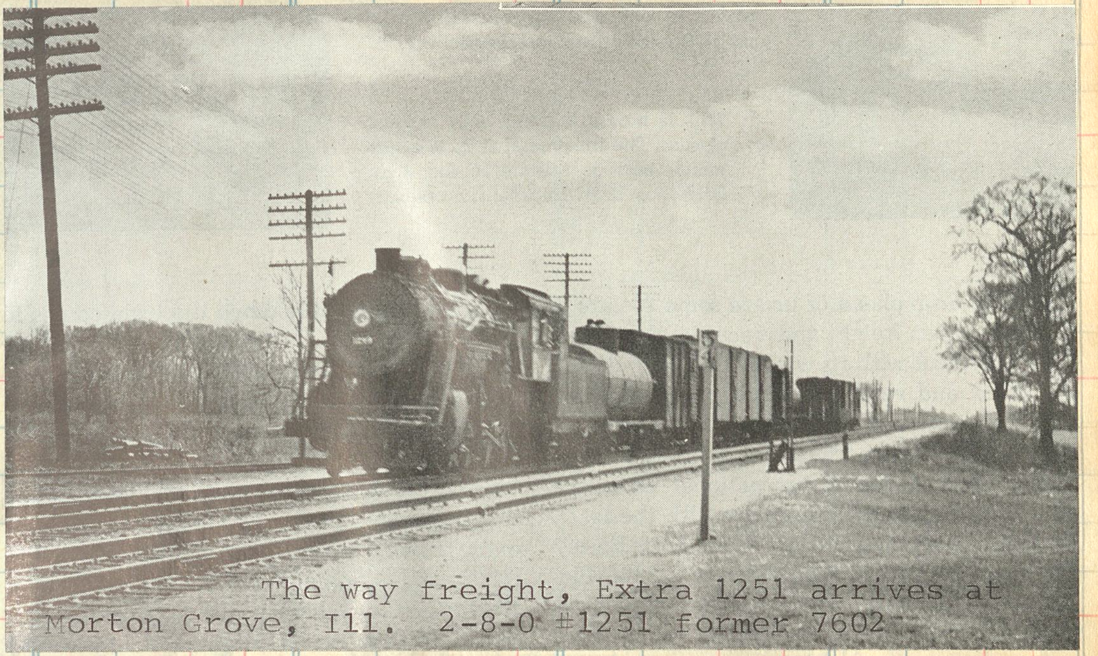
7205-7239
later 1238

| | |
|---|---|
| Cylinders | 23" x 30" |
| Drivers, diam. | 63" |
| Steam pressure | 200 lb. |
| Grate area | 48.8 sq. ft. |
| Heating surface | 3370 sq. ft. |
| Weight on drivers | 189,200 lb. |
| " total engine | 215,700 lb. |
| Tractive force | 42,820 lb. |

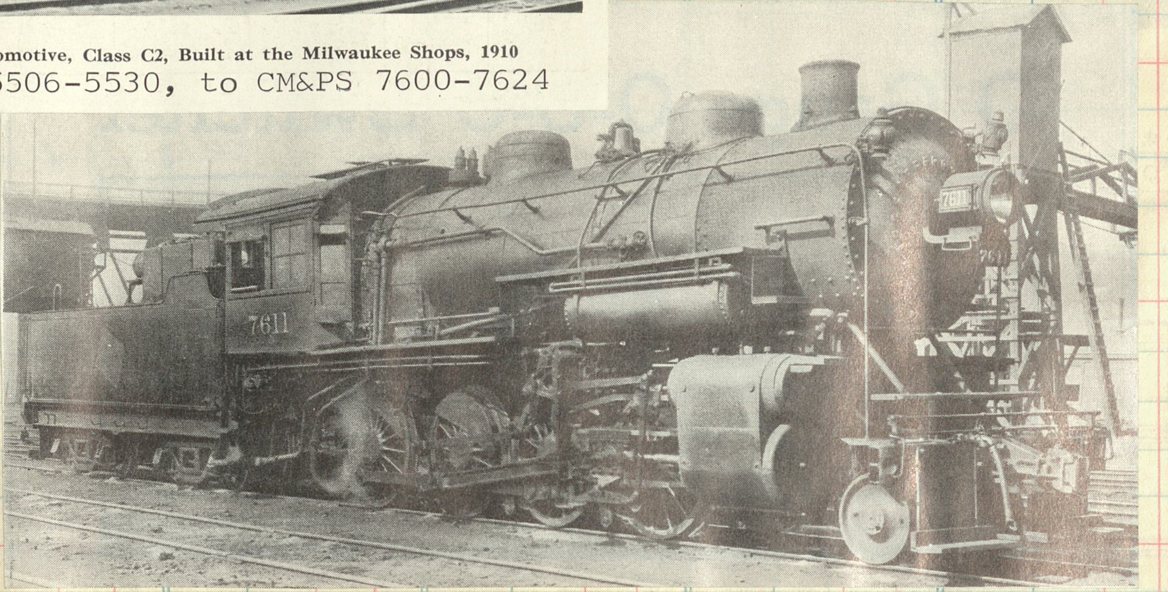


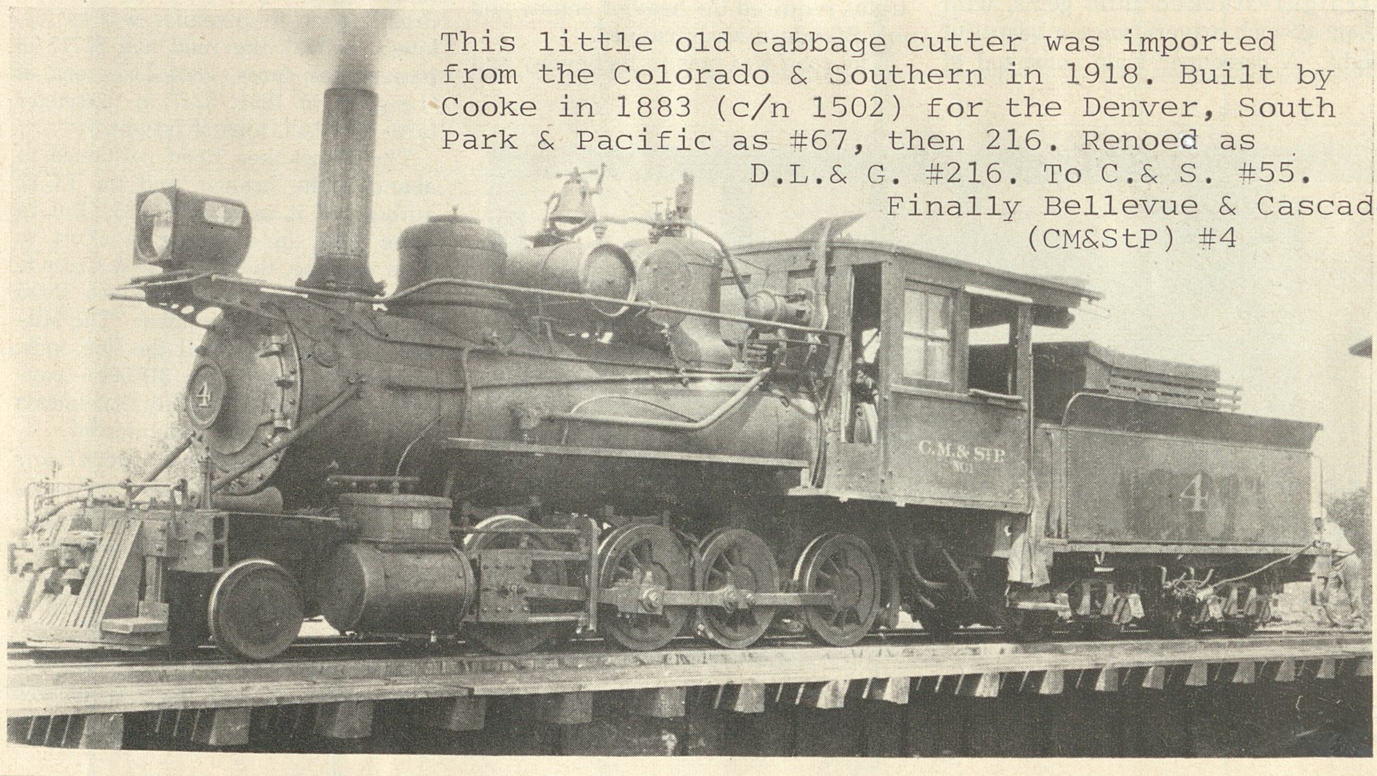
Consolidation Type Locomotive, Class C2, Built at the Milwaukee Shops, 1910

Blt as CM&StP 406-430, to CM&PS 5506-5530, to CM&PS 7600-7624

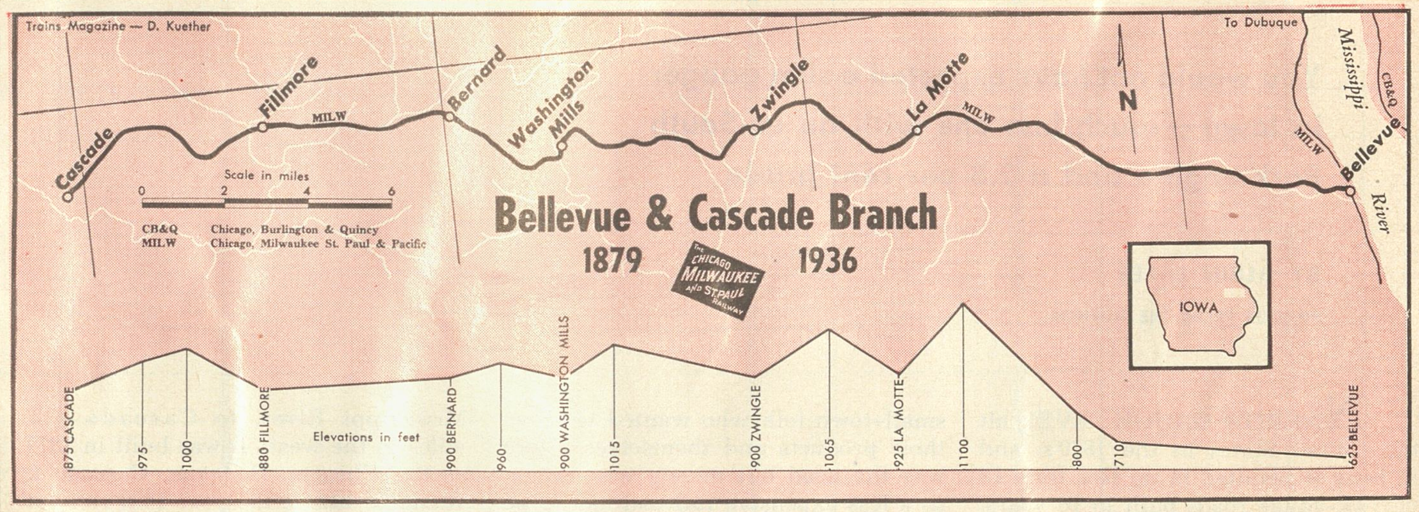


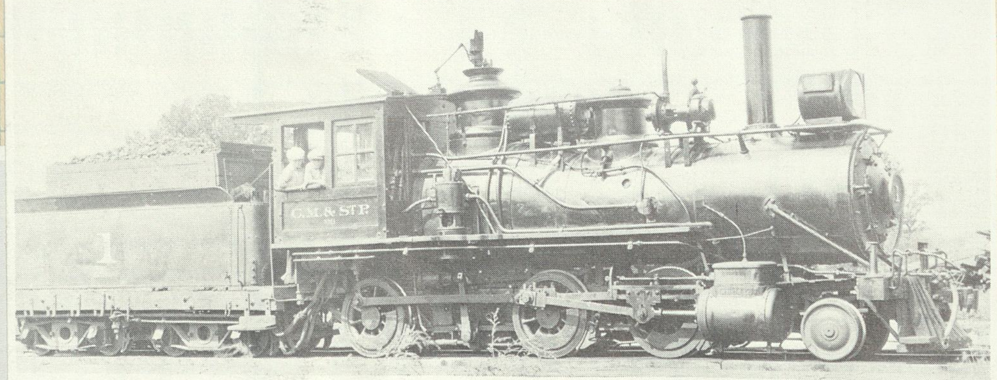
The way freight, Extra 1251 arrives at Morton Grove, Ill. 2-8-0 #1251 former 7602.





This little old cabbage cutter was imported from the Colorado & Southern in 1918. Built by Cooke in 1883 (c/n 1502) for the Denver, South Park & Pacific as #67, then 216. Renoed as D.L.& G. #216. To C.& S. #55. Finally Bellevue & Cascade (CM&StP) #4

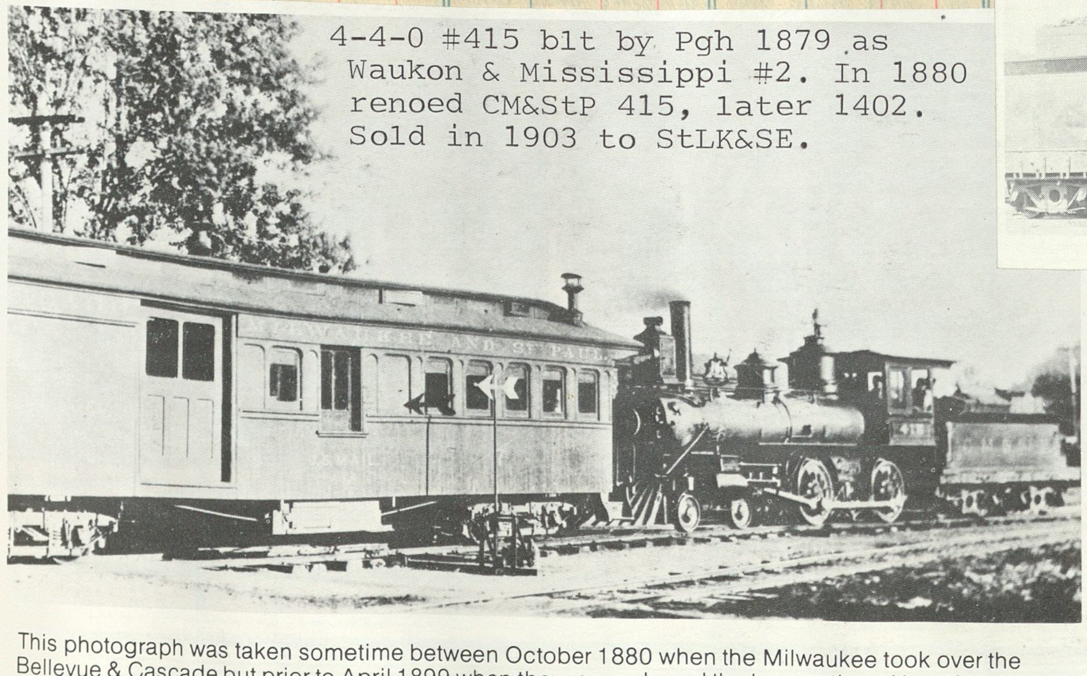




*The Number 1, Brooks 1889, operated on the Milwaukee's narrow gauge branch.*

Built for the J. E. Potts Salt & Lumber Co., #3, by Brooks in 1889. c/n 1555. Sold to AuSable & NorthWestern #8. To Banner Lumber Co & purchased by the CM&StP in Dec 1905 noed 1400. In 1912 renoed #1

4-4-0 #415 blt by Pgh 1879 as Waukon & Mississippi #2. In 1880 renoed CM&StP 415, later 1402. Sold in 1903 to StLK&SE.



This photograph was taken sometime between October 1880 when the Milwaukee took over the Bellevue & Cascade but prior to April 1899 when they re-numbered the locomotives. Note the unusual switch stand with the arrow and the mail window in the combine. *Photo collection of Albin Lee.*

## NARROW-GAGE BRANCH ABANDONED

ANOTHER old narrow-gage line has breathed its last. This time it's the 3-foot gage branch line of the Chicago, Milwaukee, St. Paul & Pacific, between Bellevue and Cascade, Iowa, 36 miles. The Interstate Commerce Commission authorized its abandonment some time ago, and now it is deserted.

This old line dates back to 1877, when the inhabitants of the town of Cascade, having been unsuccessful in getting a main line railroad, decided to build a narrow-gage line from Bellevue, on the Mississippi. Late that year the Chicago, Bellevue, Cascade & Western was organized. Amid many difficulties, among them the opposition of the down-river town of Dubuque, stock was issued and sold. Enthusiasts who didn't have the money worked out their subscriptions with teams and labor.

Some trouble was met in planning a route, but finally the line was built from the lower end of Bellevue. From there it went two miles inland on the north side of Mill Creek, then to the south and again to the north of the stream. The first station was La Motte, 11 miles west of Bellevue. Between these two towns the grade was almost 2%. Next was Zwingler, and then Washington Mills.

On September 19, 1878, construction was begun, and the line partially graded to Washington Mills. In 1879 there was a change of presidents. The work was taken over by George Runkel, acting on behalf of a Detroit capitalist, one J. F. Joy. Operating under the name of Chicago, Clinton, Dubuque & Minnesota R. R. Co., the road was completed to Cascade in 1880, amid general rejoicing.

The last timetables of the Milwaukee Road before the branch was abandoned listed two daily trains, or rather one daily round trip. No. 81 left Bellevue at 7 a. m., after the arrival of the mail from Chicago; steamed into La Motte at 8; Washington Mills, 22 miles from Bellevue, at 8.55; Fillmore, 8 miles farther, at 9.40; and finally pulled into Cascade at 10.15. When business was good this train had to "double" its cars up the heavy Mill Creek grade between Bellevue and La Motte. That is, the train was divided, the first part was taken up the hill and sidetracked at the summit, and then the second half picked up by the returning engine. At 11.15 a.m., after an hour's work in the yard, the train would start back to Bellevue, where it arrived at 2.30.

The line had about 50 box cars, 38 stock cars, 26 coal and flat cars, and one caboose. There were two passenger coaches, one a combination car, a rotary plow, and four engines, three of which (Nos. 1, 2, 3,) were Mogul or 2-6-0 type, and one (No. 4) Consolidation or 2-8-0 type. Specifications for these were given on page 404 of the October, 1932, issue of RAILROAD STORIES. When the motive power needed repairs it was loaded on a standard gage flatcar and transported to the Milwaukee shops in Dubuque or Marquette. John Adney, MacGregor, Iowa, has photos of these "mills."

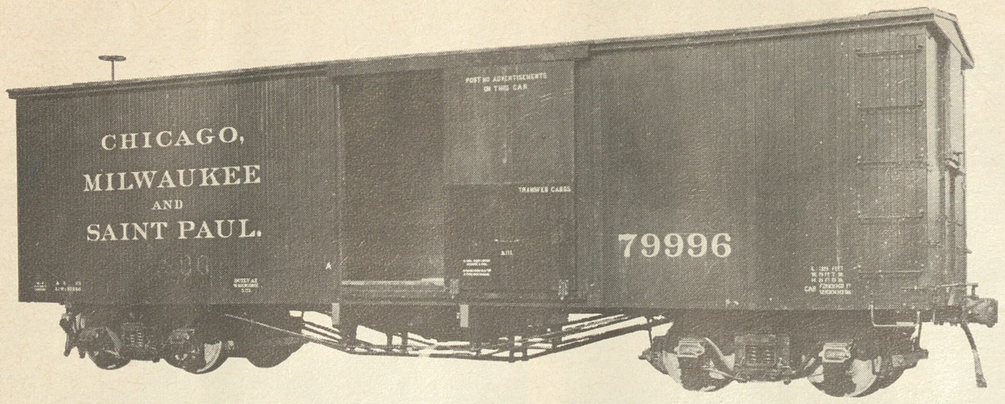
But the inconvenience of loading from standard gage to narrow gage and the increasing use of trucks and busses sounded the death-knell of the little pike. Passenger revenues dropped from $1,777 in 1927 to $247 in 1931. Less than carload freight shipments fell to one-quarter of their former volume. The branch had a deficit of $66,000 in 1931 alone.

Today you can walk over its abandoned right-of-way, through peaceful farm country, in deep valleys, and high on a steep bluff. From it you can look to the East and see the wide valley of the mighty Father of Waters, which flows on smoothly and eternally, unmindful of the troubles of men who live on its banks.

August 1933

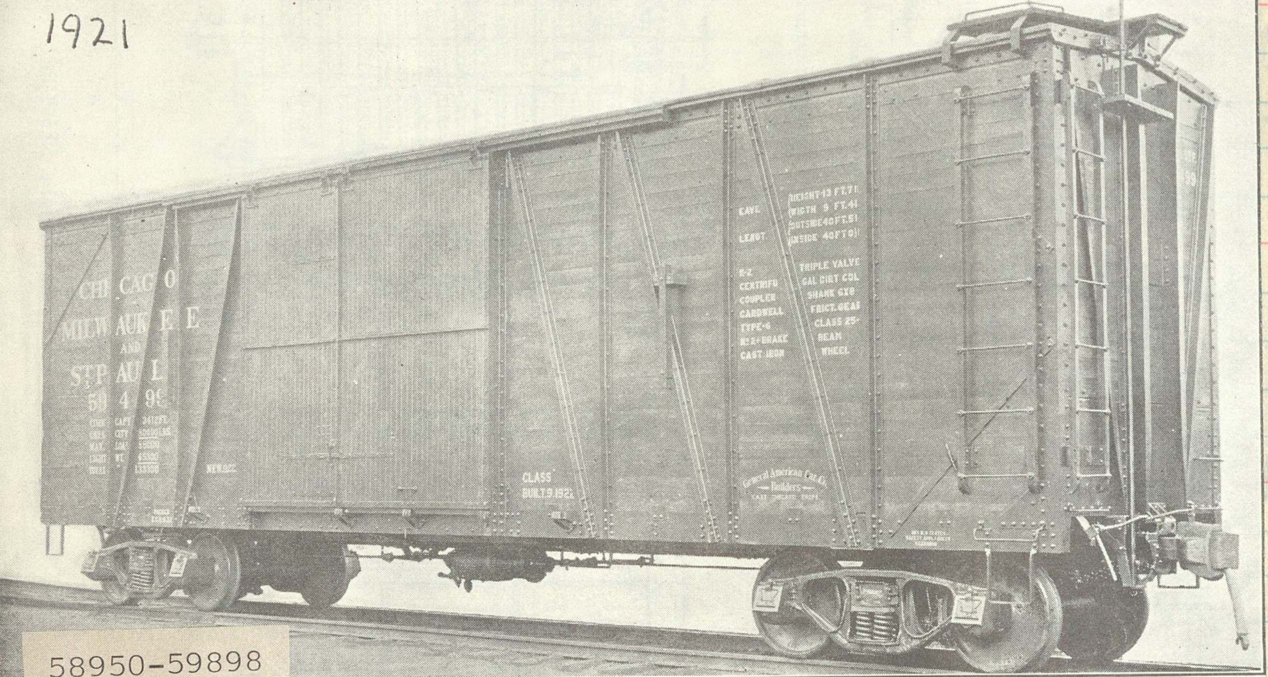
entral Syst

Sold Amount


CHICAGO,
MILWAUKEE
AND
SAINT PAUL.
79996

c 1900

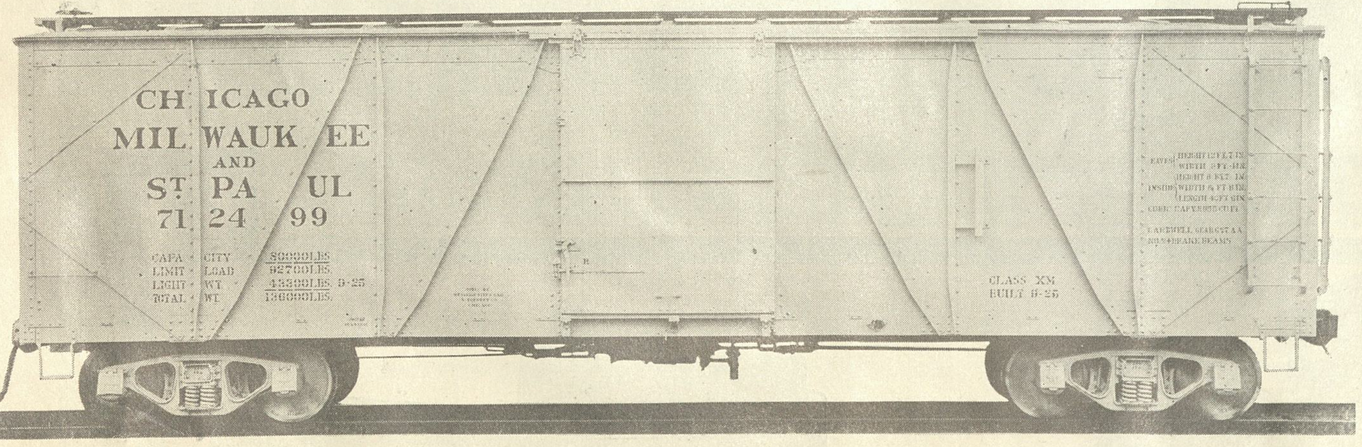
1921


CHICAGO
MILWAUKEE
ST PAUL

58950-59898

Fig. 24—Steel Frame, Single-Sheathed Automobile Box Car. Built for the C. M. & St. P. by the General American

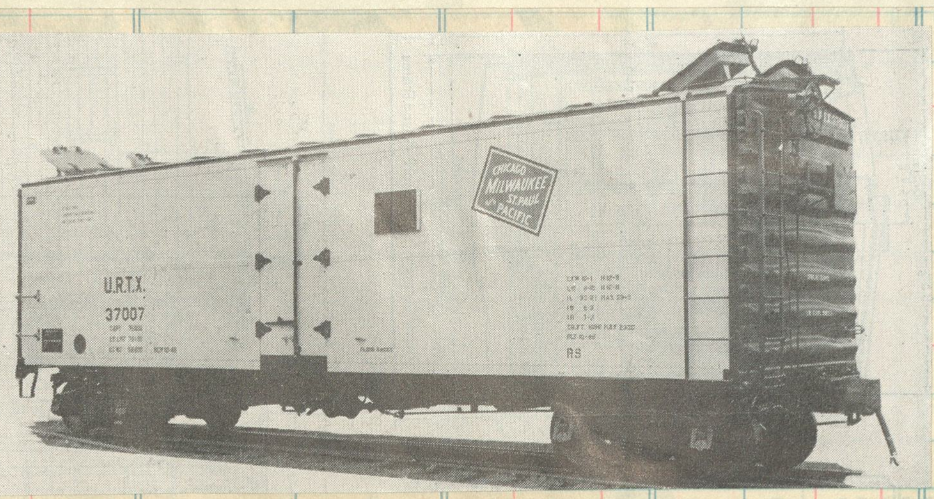
PSCC 1925 712000-712999


CHICAGO
MILWAUKEE
AND
ST PAUL
712499
CLASS XN.

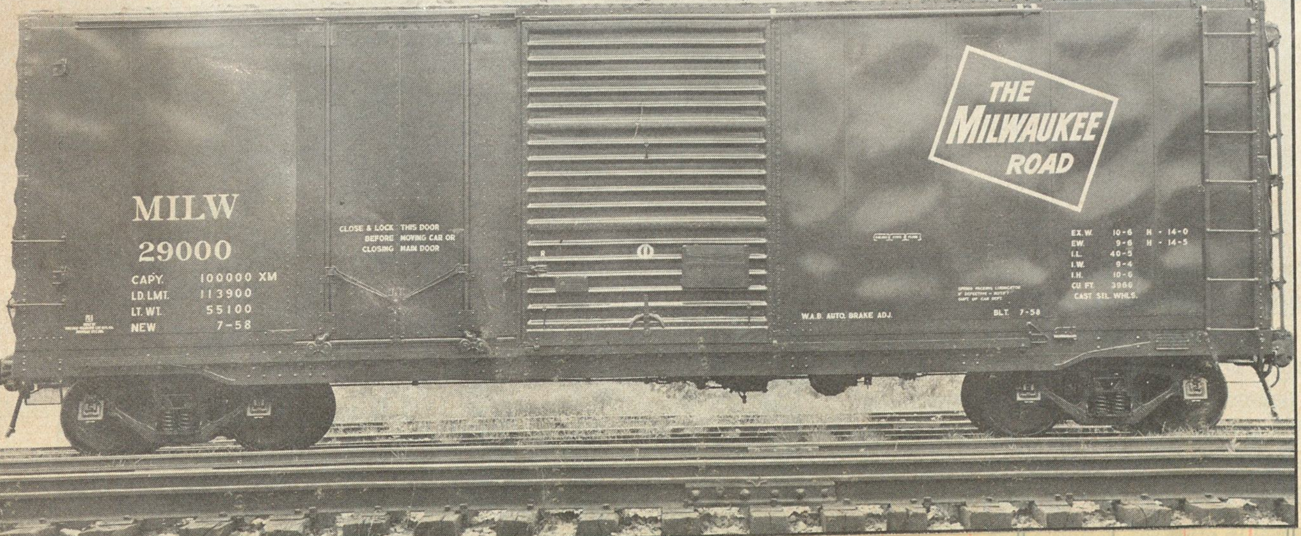
**Union Refrigerator Transit Lines 75,000-lb. capacity refrigerator car with stage icing, convertible bunkers and air circulating fans.**

Inside length between bulkheads 33 ft. 2¾ in., bulkheads collapsed 39 ft. 0 in.; width 8 ft. 3 in.; height 7 ft. 3 in.; capacity 1,988 or 2,330 cu. ft.; light weight 56,900 lb.; load limit 79,100 lb.

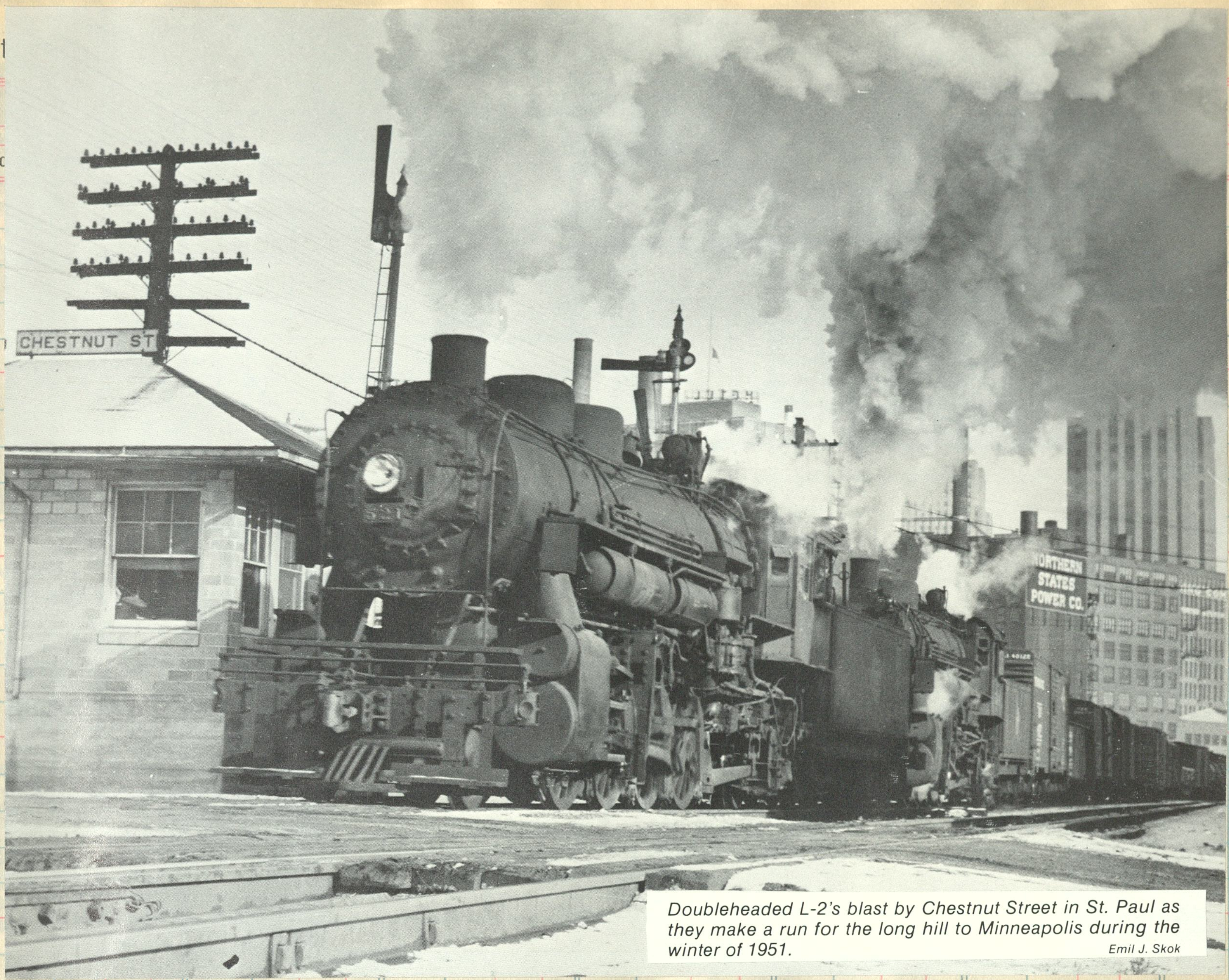
1948


U.R.T.X.
37007
CHICAGO MILWAUKEE ST PAUL AND PACIFIC

1958

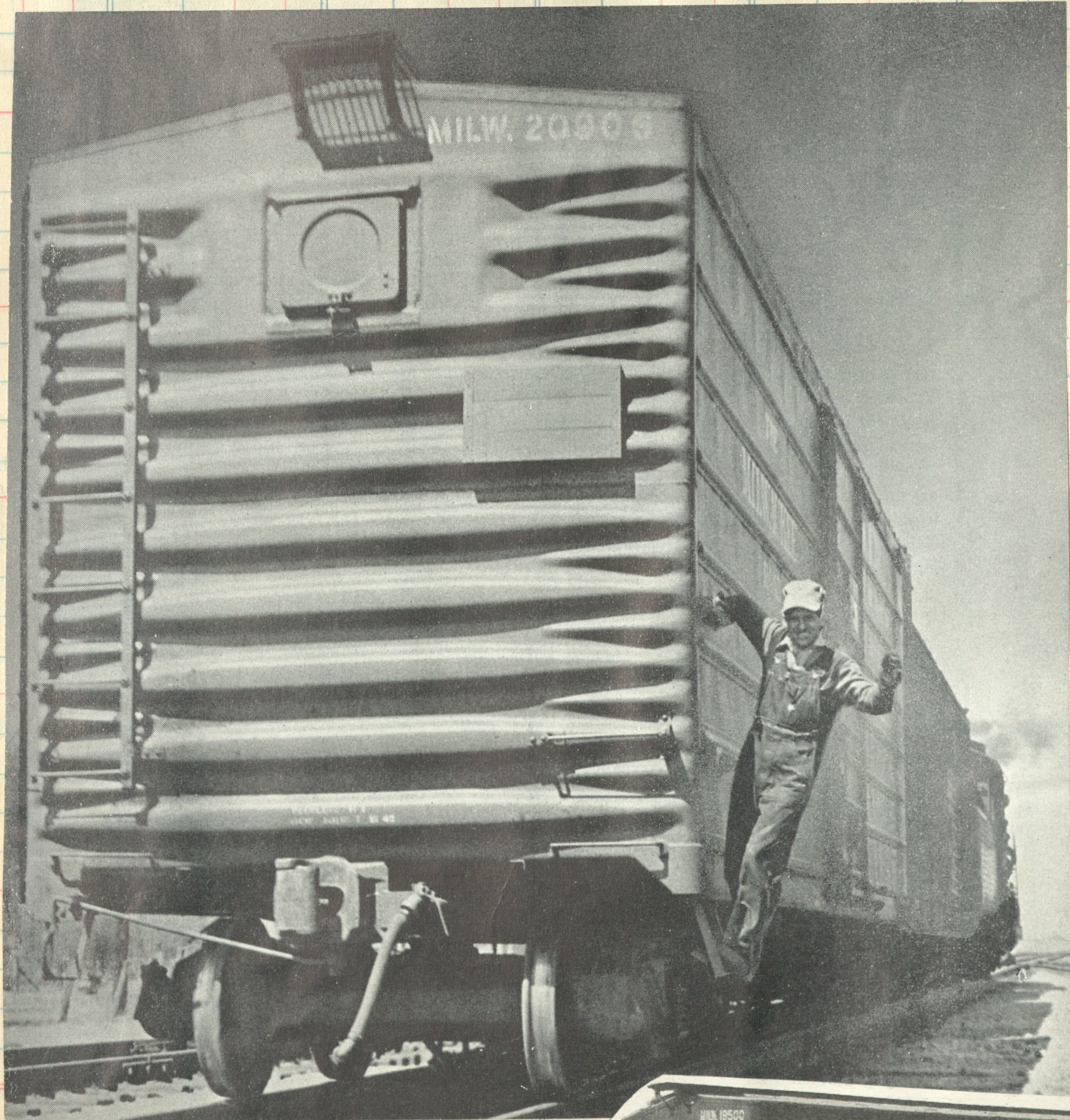

THE MILWAUKEE ROAD
MILW
29000
CAPY. 100000
LD.LMT. 117900
LT.WT. 55100
NEW 7-58

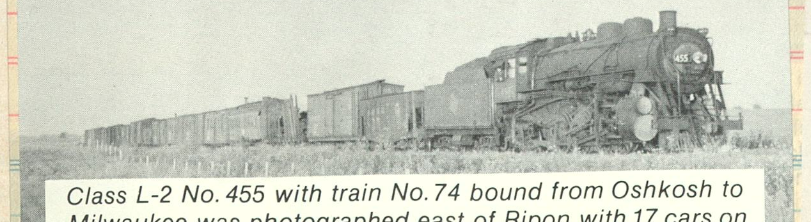
Pullman Standard Photo Built 7-58


CHESTNUT ST
NORTHERN STATES POWER CO.

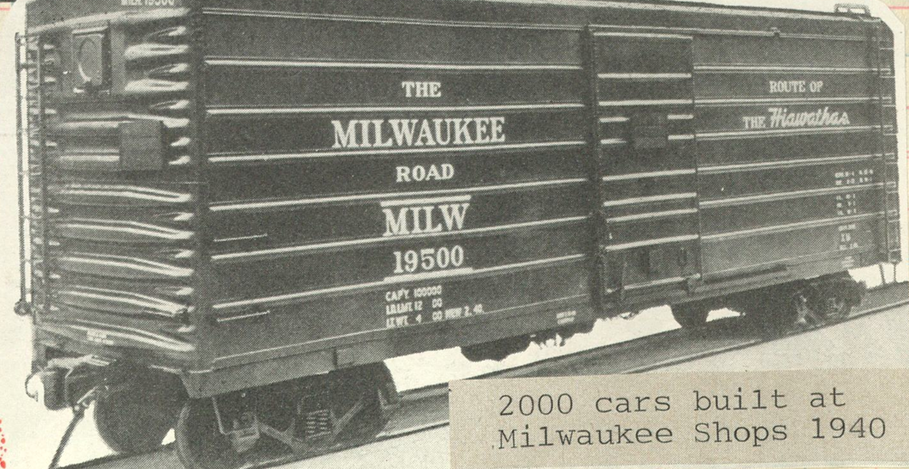
*Doubleheaded L-2's blast by Chestnut Street in St. Paul as they make a run for the long hill to Minneapolis during the winter of 1951.*

Emil J. Skok

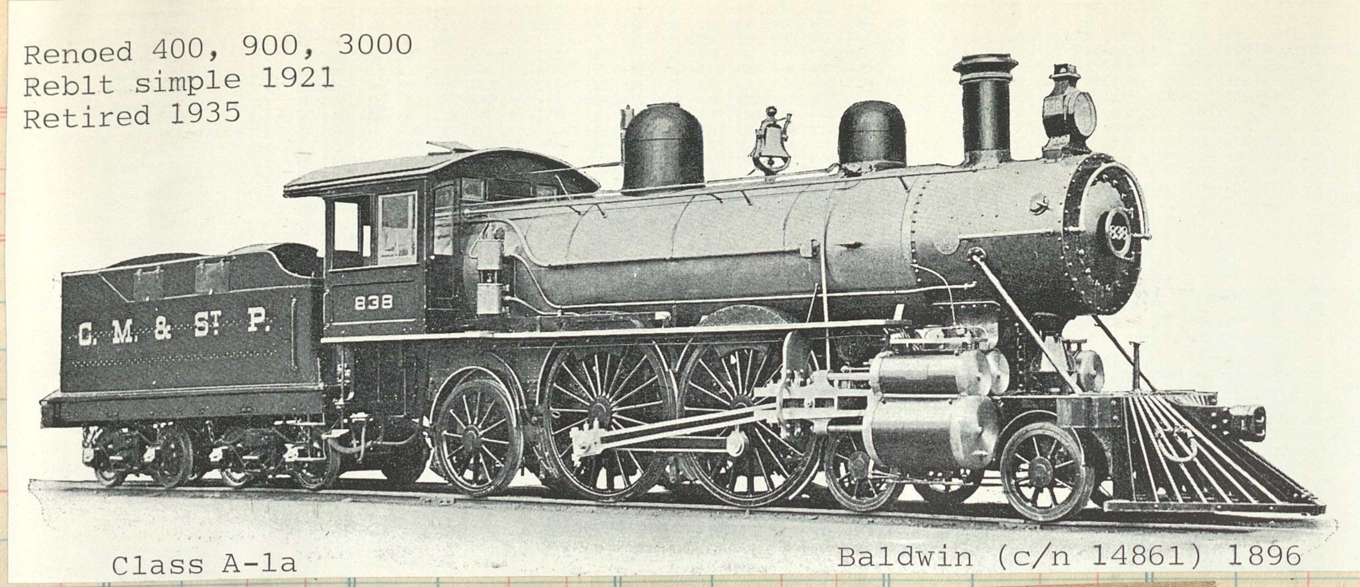




*Class L-2 No. 455 with train No. 74 bound from Oshkosh to Milwaukee was photographed east of Ripon with 17 cars on September 6, 1947.*


THE
MILWAUKEE
ROAD
MILW
19500
ROUTE OF THE Hiawathas

2000 cars built at
Milwaukee Shops 1940



Renoed 400, 900, 3000
Reblt simple 1921
Retired 1935

Class A-1a

Baldwin (c/n 14861) 1896

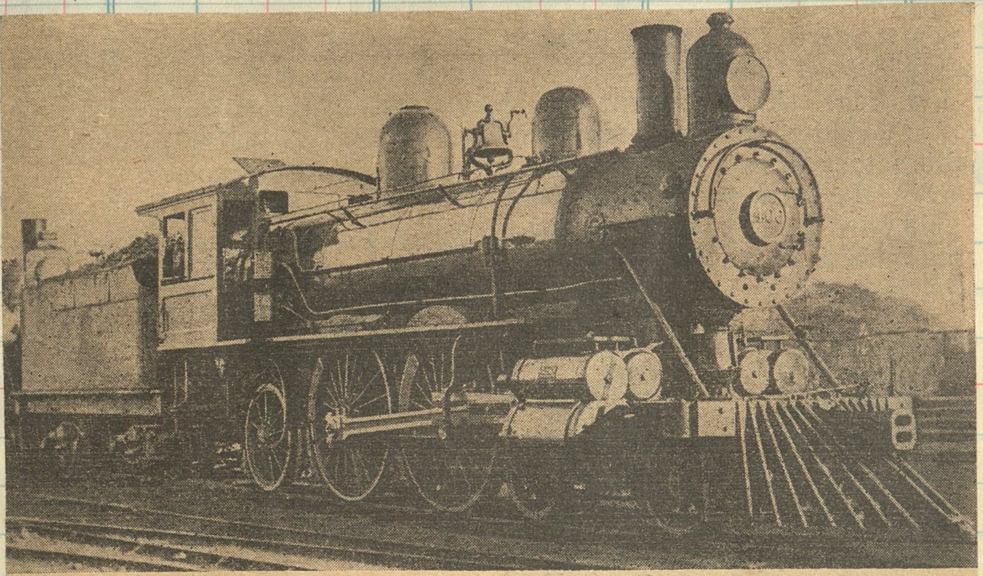
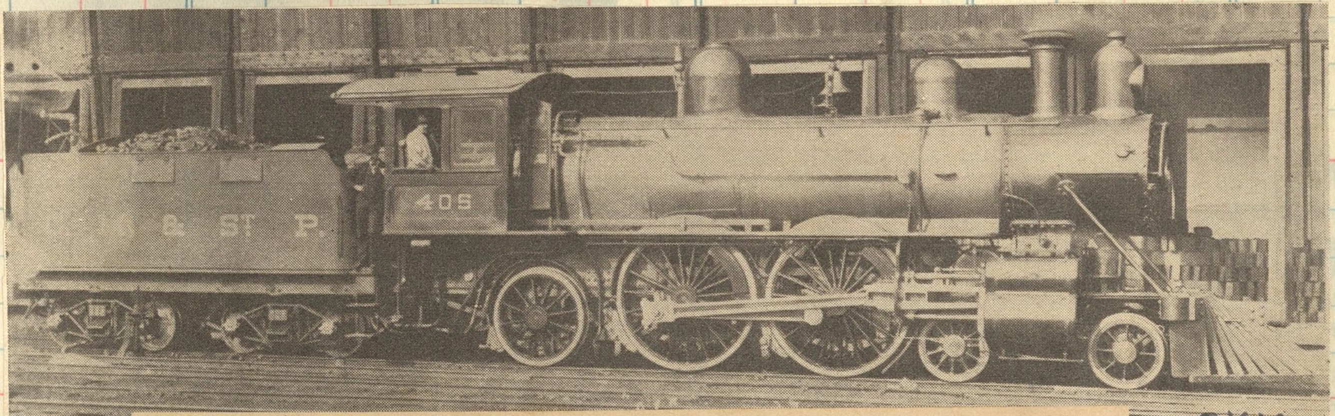


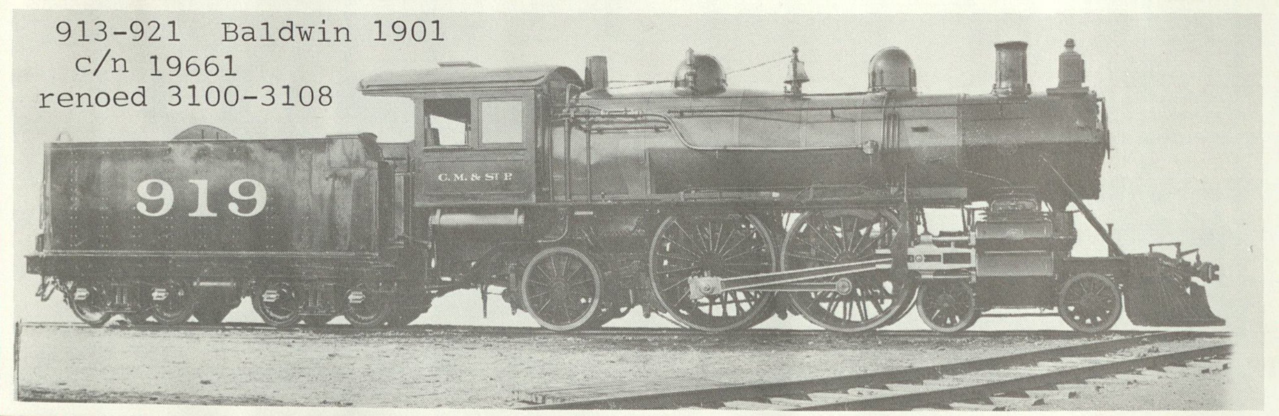
Photo by C. E. McCann, 2020 Colfax St., Evanston, Ill.

NOT BUILT for mountain hauling, but the St. Paul's 400, a high-wheeled Baldwin Compound, made rail history between Chicago and Milwaukee in the Nineties

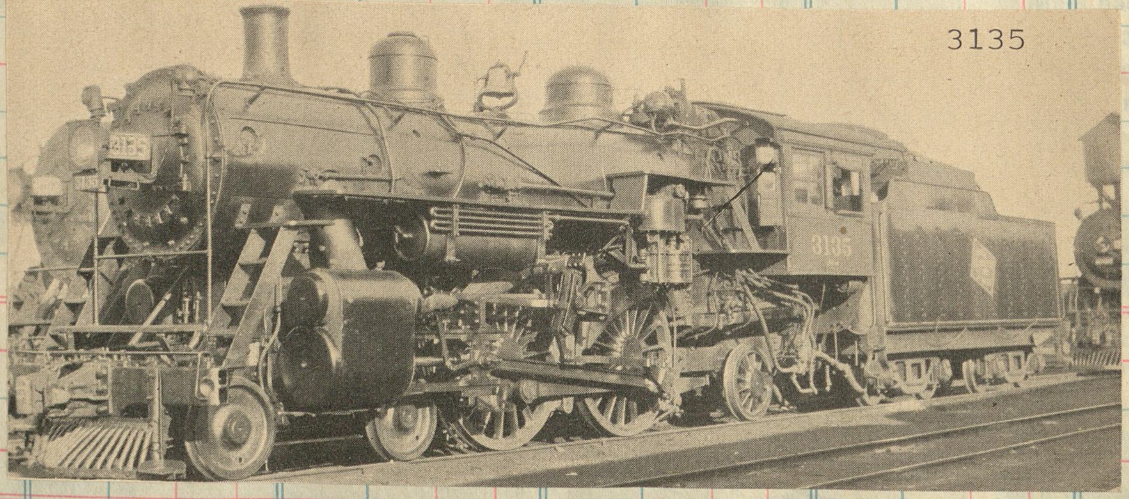


Blt as #872 by Baldwin 1898 c/n 16316
Renoed 405, 905, 3005, 22 Retired 1939

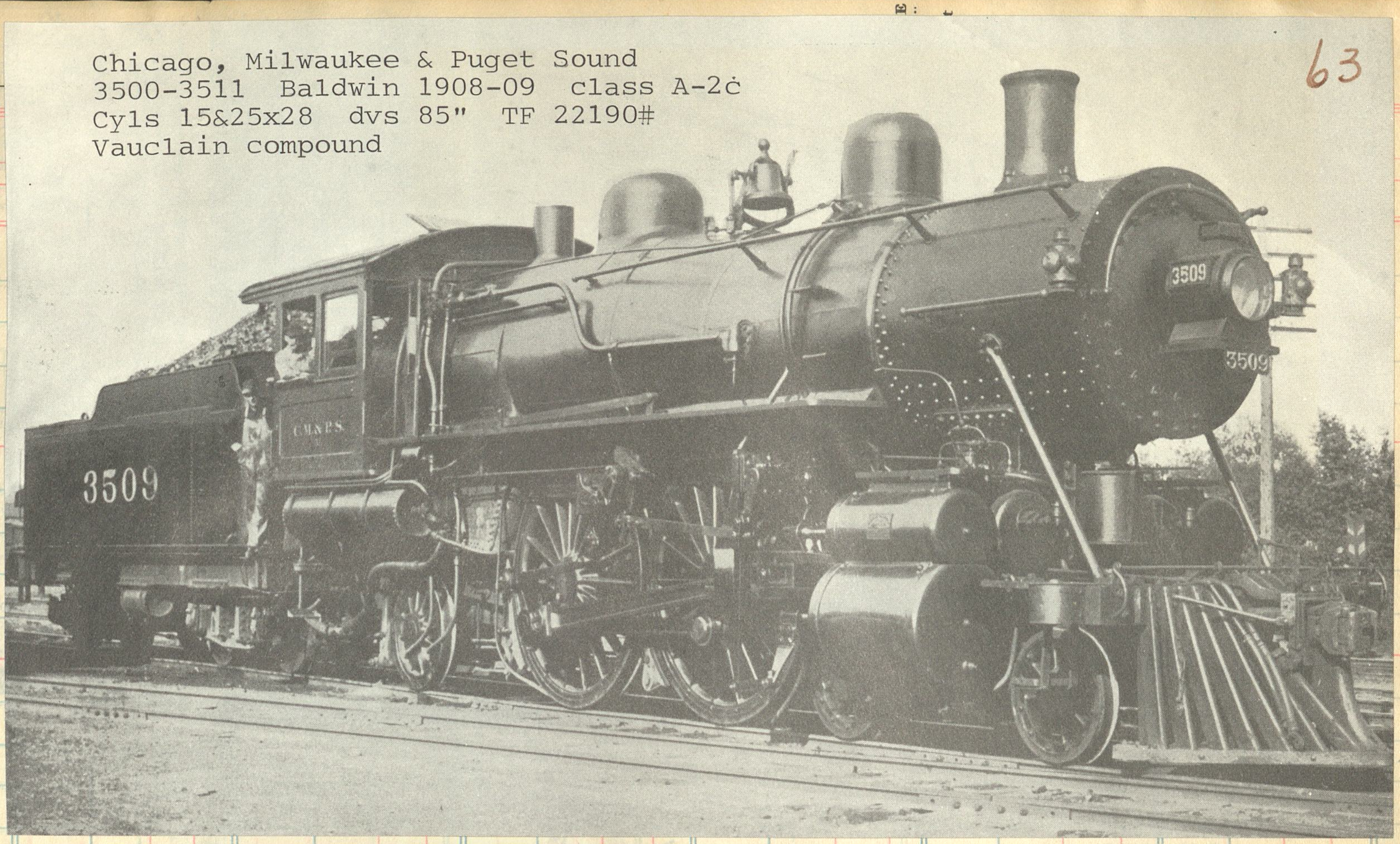
OKM



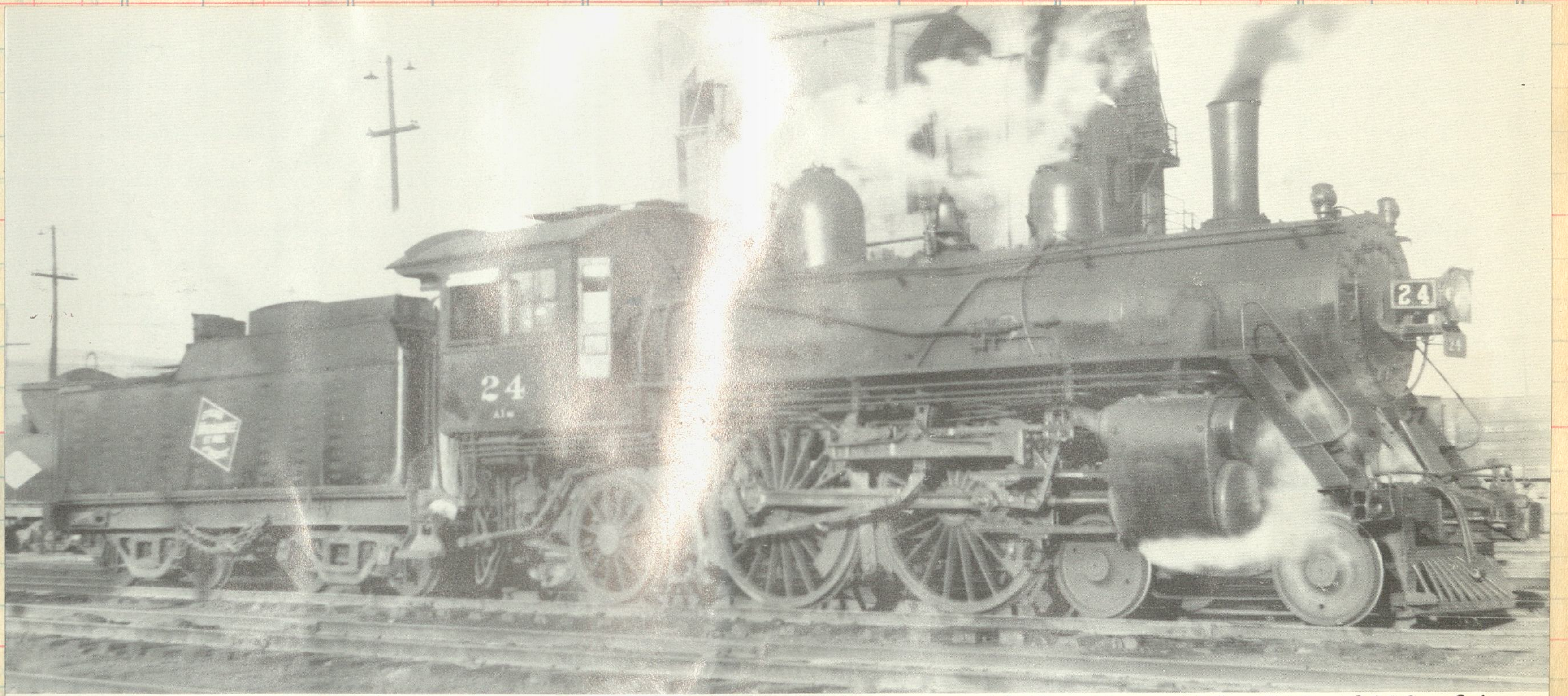
913-921 Baldwin 1901
c/n 19661
renoed 3100-3108



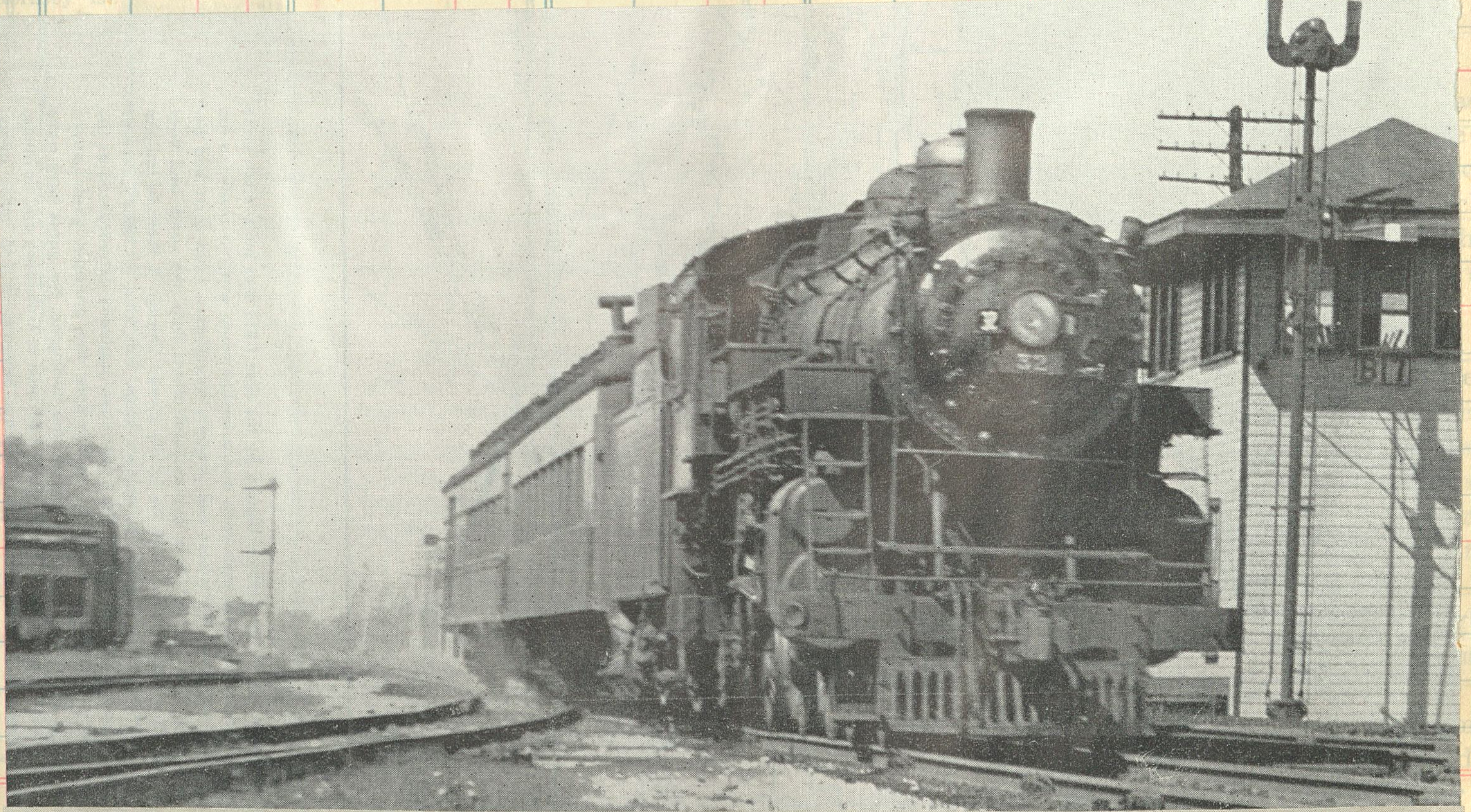
3135



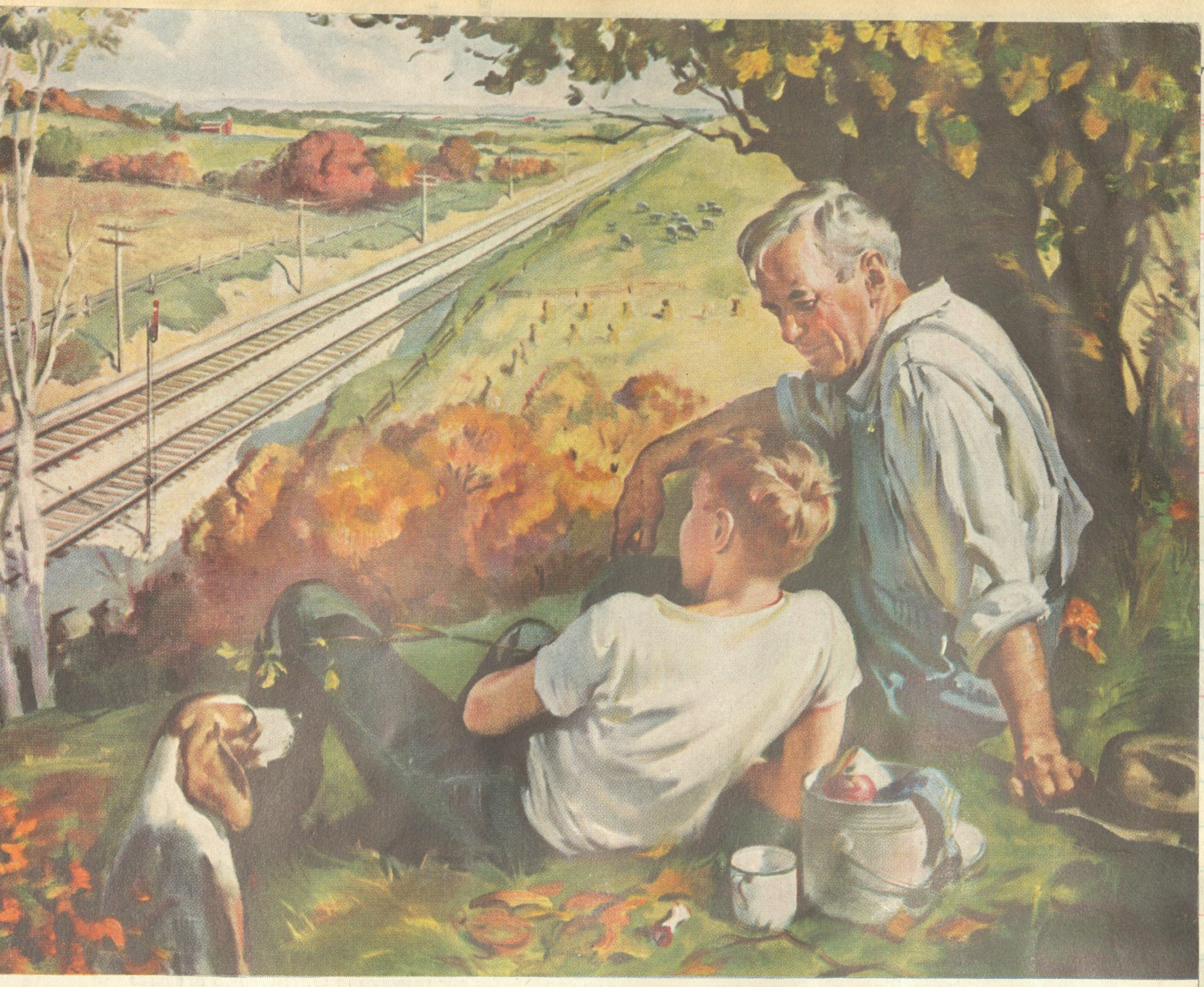
Chicago, Milwaukee & Puget Sound
3500-3511 Baldwin 1908-09 class A-2c
Cyls 15&25x28 dvs 85" TF 22190#
Vauclain compound



Atlantic #24 built in 1898 by Baldwin (c/n 16319) Org #875, then 408, 908, 3008, 24



Atlantic #32 comes sailing past Tower B-17, at the west end of the Bensenville Yard (Chicago), with a two car local. Built in 1909 by Baldwin (c/n 33778) for the Idaho & Washington Northern as their #31. To the CM&StP in 1916 noed 3512. In 1926 was renoed 3135, as shown at left, and in 1938 was noed 32. Retired in Nov 1951.



## DAD, WHERE DO THE TRACKS GO?

"SON, if you walked those tracks west, you'd walk into a country so big you'd feel about knee high to a grasshopper.

"You'd see Indians sure—and cowboys, too—but you'd see lots of other things. Miles and miles of grain, more sheep than you ever counted—cattle galore; sky-scrapin' mountains that look like they had a hunk of ice cream on top of 'em.

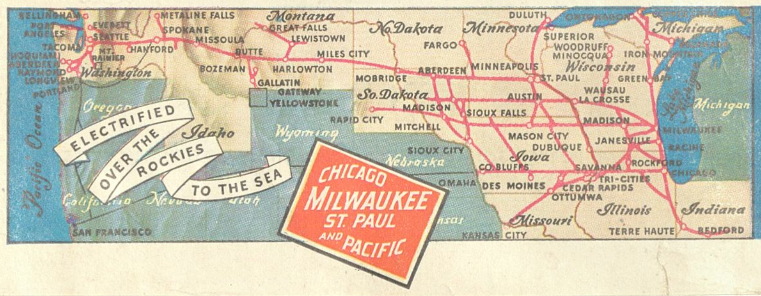
"You'd see rushin' water turnin' factory wheels and changin' yellow waste country to land as green as our pasture; apples half as big as your head and trees as tall as Jack's bean stalk. You'd meet friendly people, livin' on farms and ranches and in up-and-comin' towns and cities that ain't much older than you, as towns go.

"Finally, you'd wind up lookin' out over the Pacific Ocean—lookin' west to where your brother Jim is with his Marine outfit. Yes sir, if you'd walk those tracks west, you'd see a powerful lot of what Jim's fightin' for."

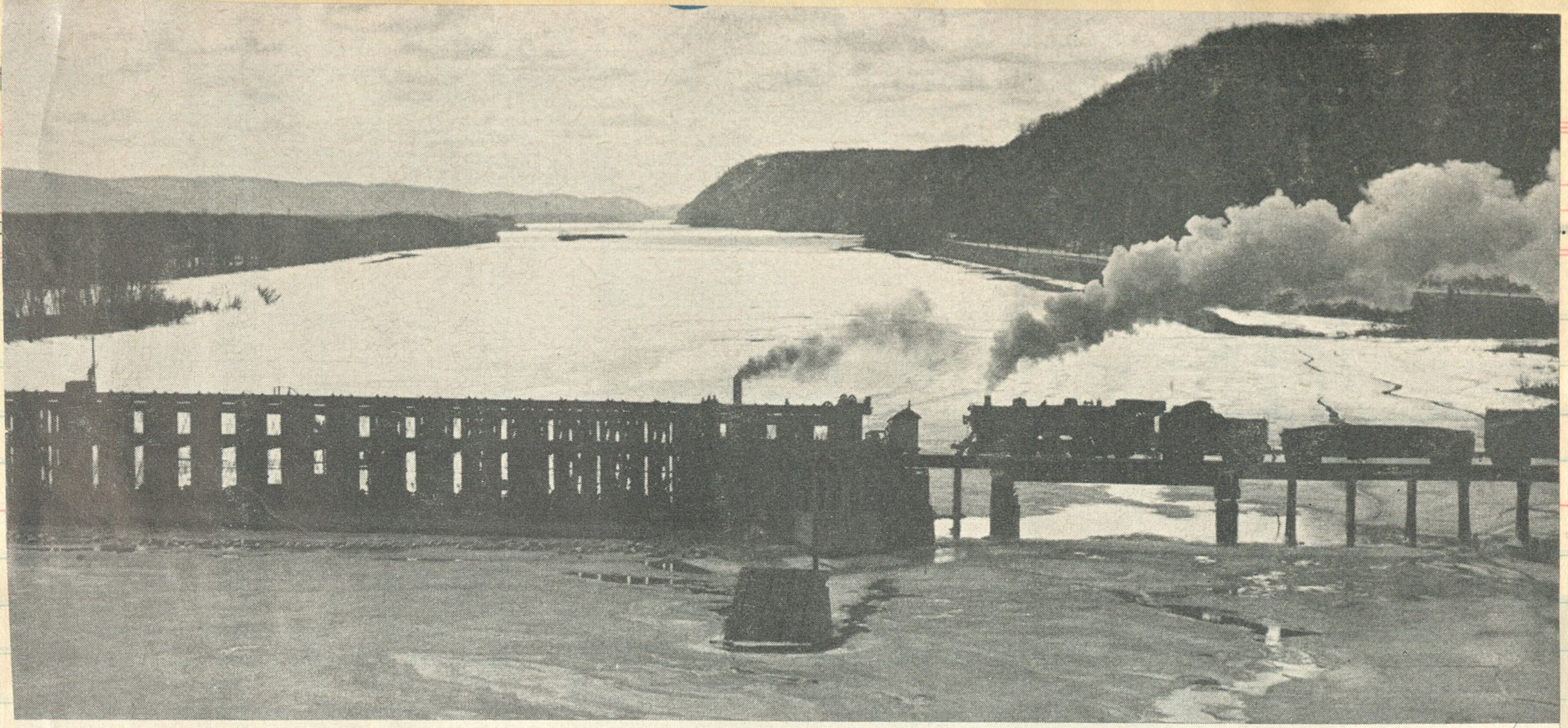
* * *

The Milwaukee Road tracks lead to new opportunities. You can choose your climate and scenery—the type of endeavor you're fitted for. Live in old established communities or pioneer in "young" country. If you're thinking of making a move in the post-war days look to the west and northwest!

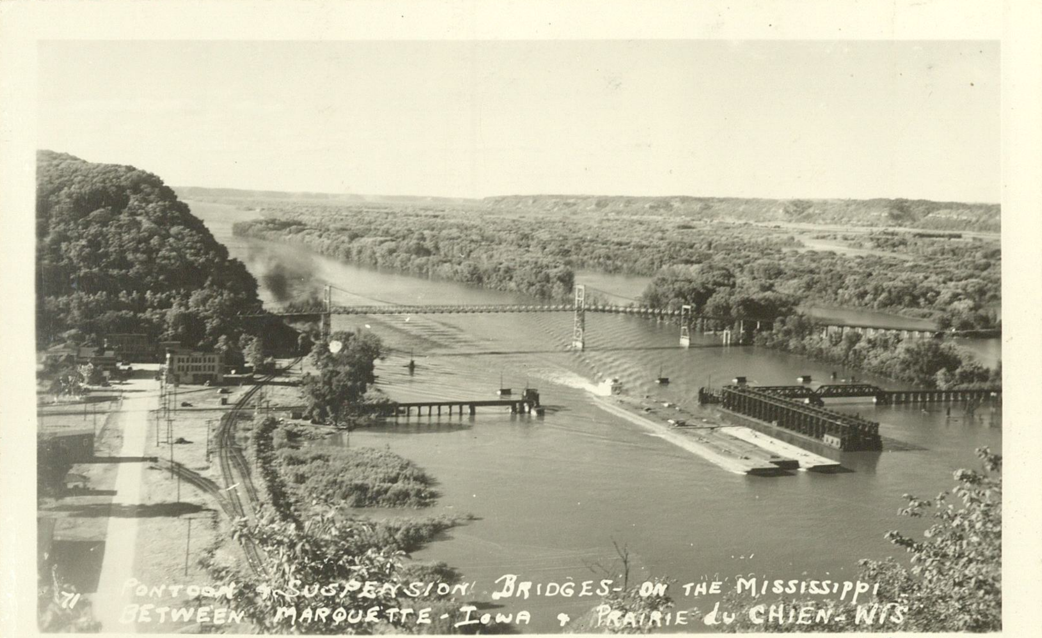
11,000-MILE SUPPLY LINE FOR WAR AND HOME FRONTS


ELECTRIFIED
OVER THE
ROCKIES
TO THE SEA
CHICAGO MILWAUKEE ST. PAUL AND PACIFIC
Pacific Ocean
Washington
Oregon
California
Nevada
Idaho
Montana
Wyoming
No. Dakota
So. Dakota
Nebraska
Minnesota
Iowa
Wisconsin
Michigan
Illinois
Indiana
Missouri
SEATTLE
TACOMA
SPOKANE
MISSOULA
BUTTE
GREAT FALLS
LEWISTOWN
MILES CITY
HARLOWTON
BOZEMAN
ABERDEEN
MOBRIDGE
RAPID CITY
SIOUX FALLS
SIOUX CITY
OMAHA
DES MOINES
MINNEAPOLIS
ST. PAUL
DULUTH
LA CROSSE
MADISON
MILWAUKEE
CHICAGO
KANSAS CITY
TERRE HAUTE
SAN FRANCISCO

**THE MILWAUKEE ROAD**

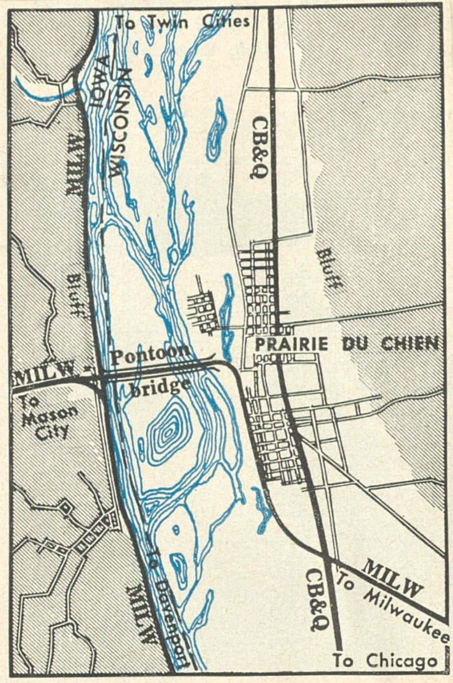


A Milwaukee Road F-3 Pacific heads for Prairie du Chien over the 276-foot pontoon bridge that spans the Mississippi River's west channel. Gordon H. Lord, from Milwaukee Road.

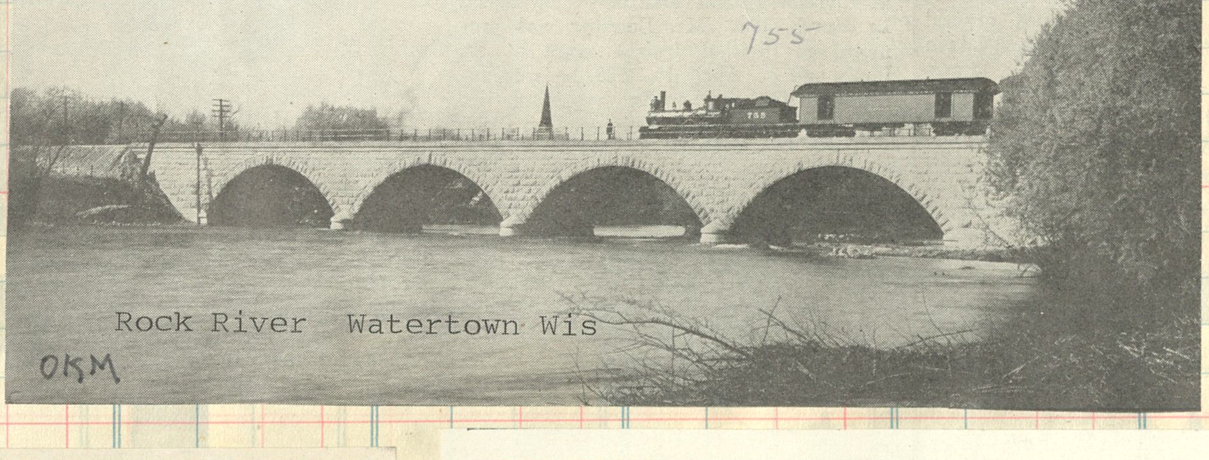


Pontoon & Suspension Bridges - on the Mississippi Between Marquette - Iowa & Prairie du Chien - Wis

OKM

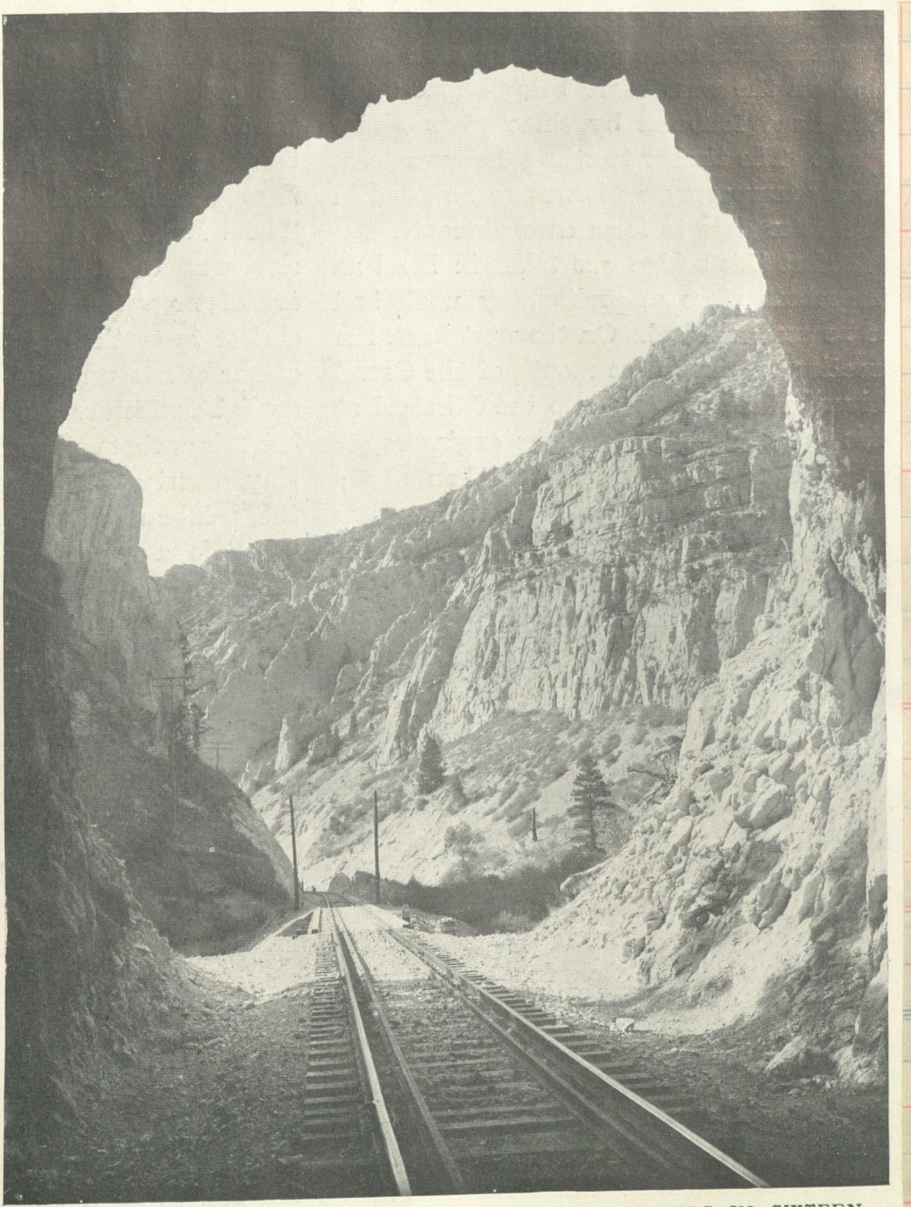

To Twin Cities
IOWA
WISCONSIN
MILW
CB&Q
Bluff
Bluff
PRAIRIE DU CHIEN
Pontoon
bridge
MILW
To Mason City
To Davenport
MILW
MILW
To Milwaukee
CB&Q
To Chicago

755

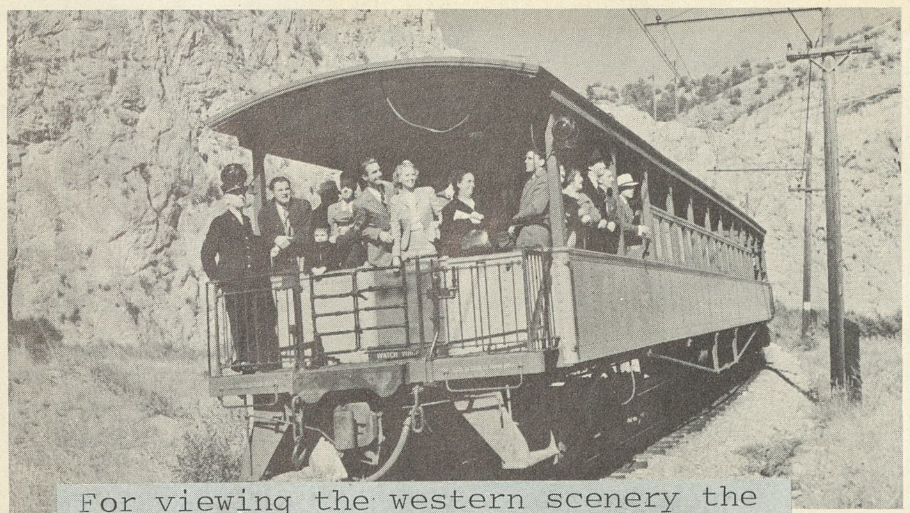


Rock River Watertown Wis

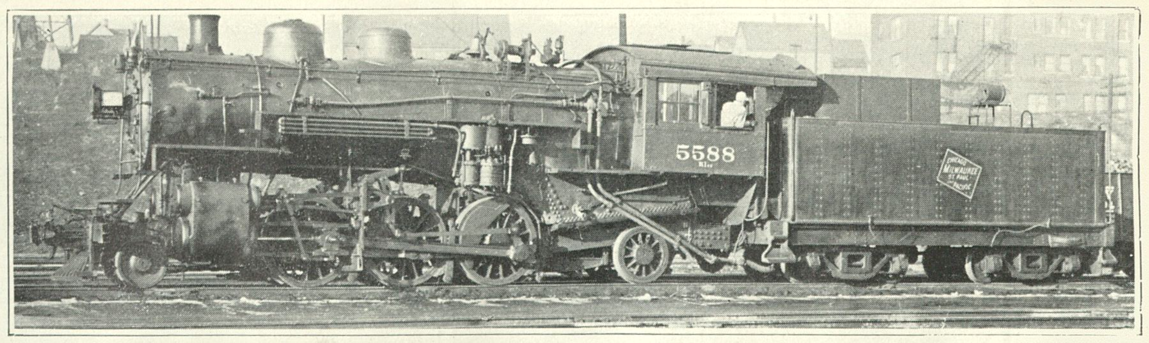
OKM



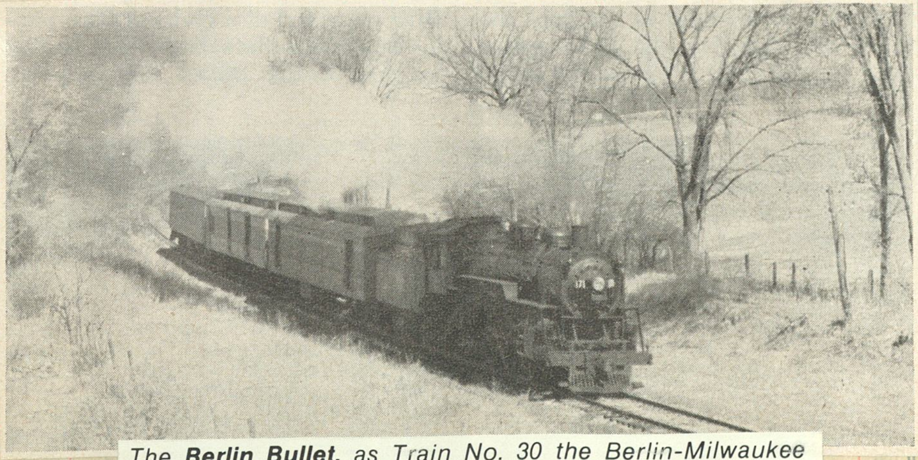
LOOKING ALONG THE LINE FROM ONE OF THE TUNNELS IN SIXTEEN-MILE CANYON, MONTANA. C.M.& P.S.



For viewing the western scenery the "rubberneck" observation car had no equal, especially on the electrified sections of the Milwaukee that was free of smoke and cinders

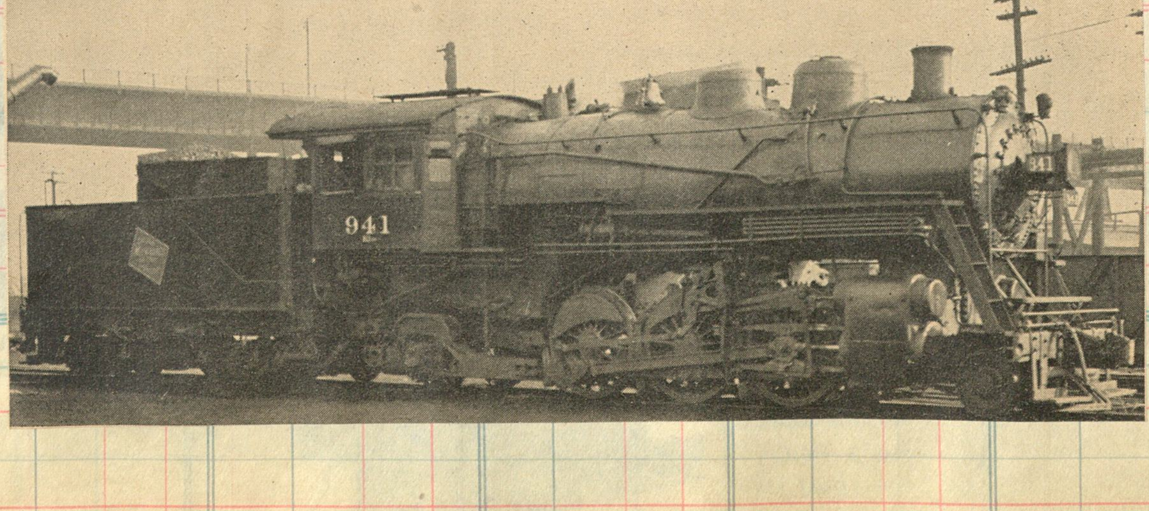


To cover operations on the new Pacific extension one hundred Prairie [2-6-2] engines were delivered in 1908 noed CM&PS 2000-2099. Fifty, 2000-2019 & 2070-2099 were built at Milwaukee Shops and Brooks constructed 2020-2069. In 1912 were renoed CM&StP 5500-5599

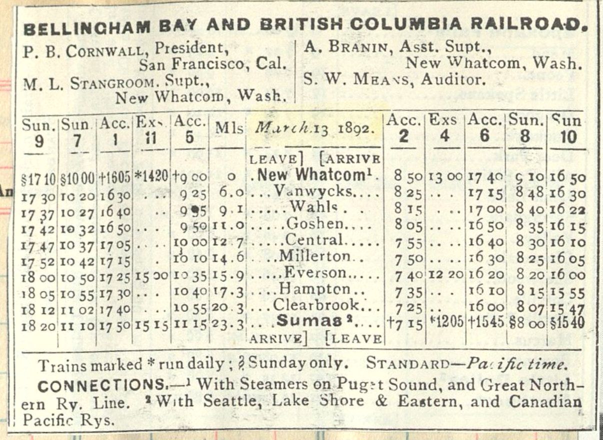


The **Berlin Bullet**, as Train No. 30 the Berlin-Milwaukee passenger was affectionately known, was photographed east of Richfield, Wisconsin in May, 1954 powered by a class F-3 Pacific No. 171.

former 5593



Clos. No. Sold



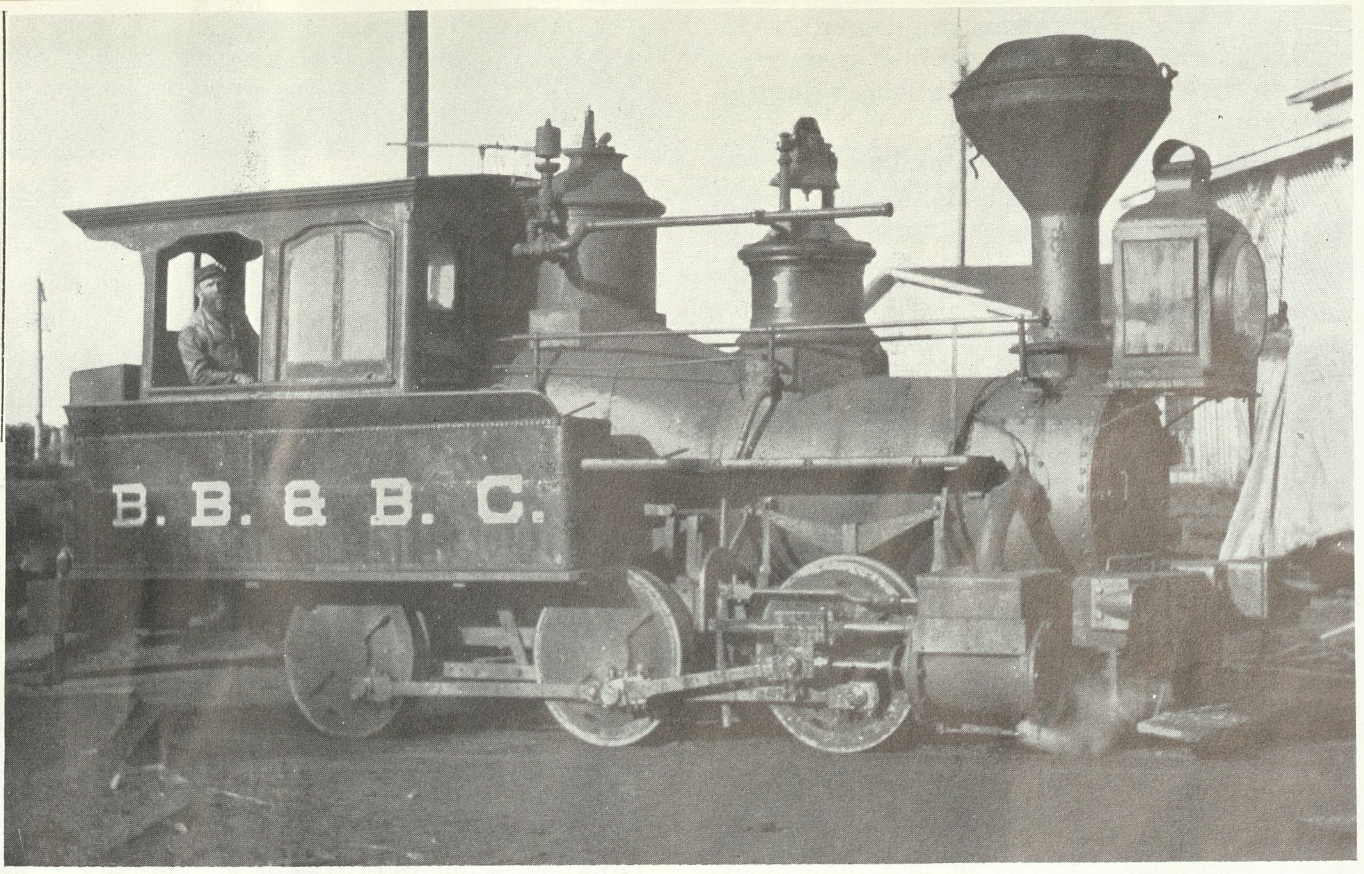
**BELLINGHAM BAY AND BRITISH COLUMBIA RAILROAD.**

P. B. CORNWALL, President, San Francisco, Cal.
M. L. STANGROOM. Supt., New Whatcom, Wash.
A. BRANIN, Asst. Supt., New Whatcom, Wash.
S. W. MEANS, Auditor.

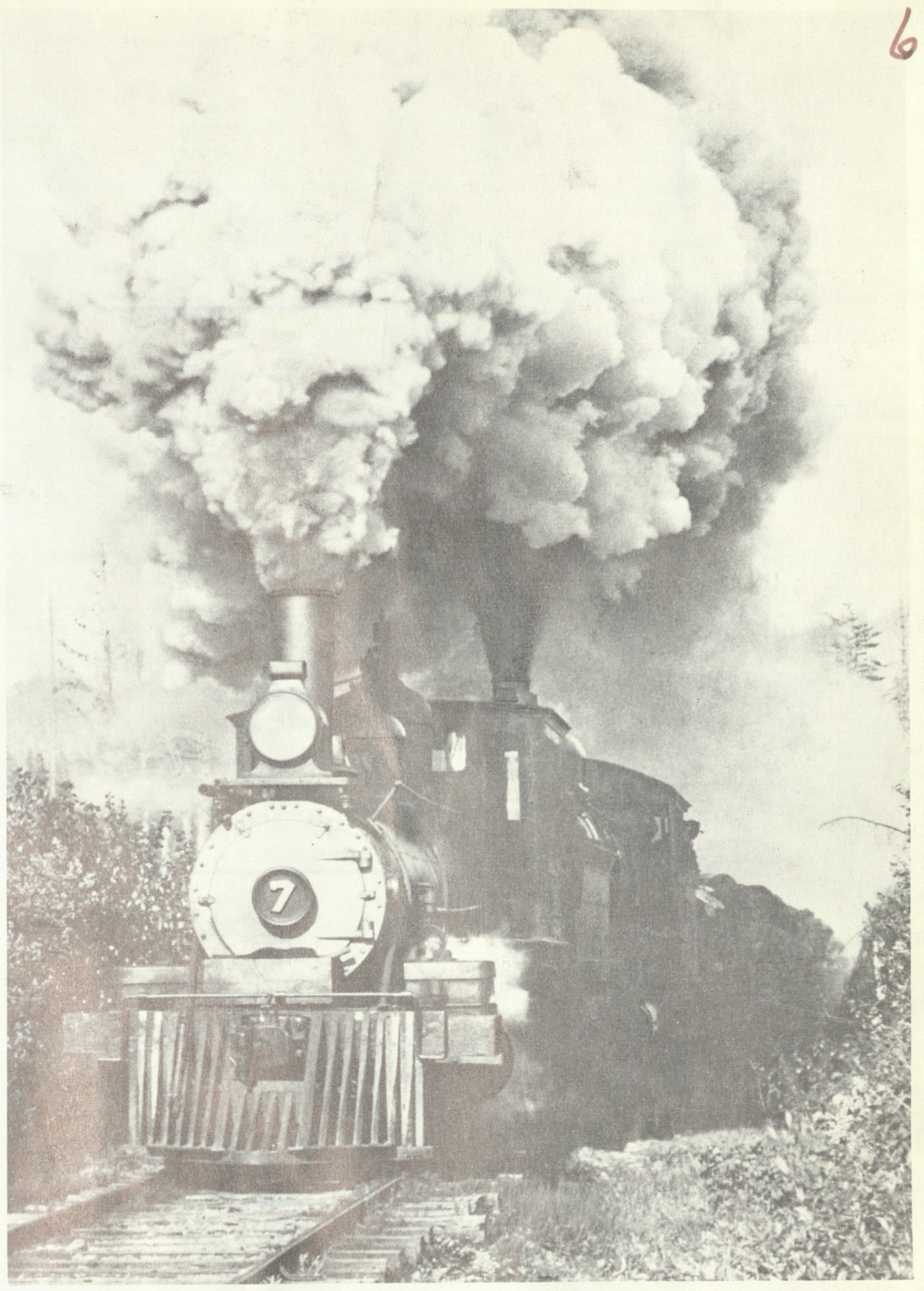
| Sun. 9 | Sun 7 | Acc. 1 | Exs 11 | Acc. 5 | Mls | *March* 13 1892. | Acc. 2 | Exs 4 | Acc. 6 | Sun. 8 | Sun 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | LEAVE] [ARRIVE | | | | | |
| §17 10 | §10 00 | †1605 | *1420 | †9 00 | 0 | .**New Whatcom**¹. | 8 50 | 13 00 | 17 40 | 9 10 | 16 50 |
| 17 30 | 10 20 | 16 30 | . . . | 9 25 | 6.0 | ...Vanwycks.... | 8 25 | . . | 17 15 | 8 48 | 16 30 |
| 17 37 | 10 27 | 16 40 | . . | 9 35 | 9.1 | .....Wahls . . | 8 15 | . . . | 17 00 | 8 40 | 16 22 |
| 17 42 | 10 32 | 16 50 | . . . | 9 50 | 11.0 | ....Goshen.... | 8 05 | . . . | 16 50 | 8 35 | 16 15 |
| 17 47 | 10 37 | 17 05 | . . . | 10 00 | 12.7 | .....Central..... | 7 55 | . . . | 16 40 | 8 30 | 16 10 |
| 17 52 | 10 42 | 17 15 | . | 10 10 | 14.6 | ...Millerton.. | 7 50 | . . . | 16 30 | 8 25 | 16 05 |
| 18 00 | 10 50 | 17 25 | 15 00 | 10 35 | 15.9 | .....Everson..... | 7 40 | 12 20 | 16 20 | 8 20 | 16 00 |
| 18 05 | 10 55 | 17 30 | . . . | 10 40 | 17.3 | ....Hampton.. | 7 35 | . . . | 16 10 | 8 15 | 15 55 |
| 18 12 | 11 02 | 17 40 | . . . | 10 55 | 20.3 | ...Clearbrook... | 7 25 | . . | 16 00 | 8 07 | 15 47 |
| 18 20 | 11 10 | 17 50 | 15 15 | 11 15 | 23.3 | ...**Sumas**²... | †7 15 | *1205 | †1545 | §8 00 | §15 40 |
| | | | | | | ARRIVE] [LEAVE | | | | | |

Trains marked * run daily; § Sunday only. STANDARD—*Pacific time.*

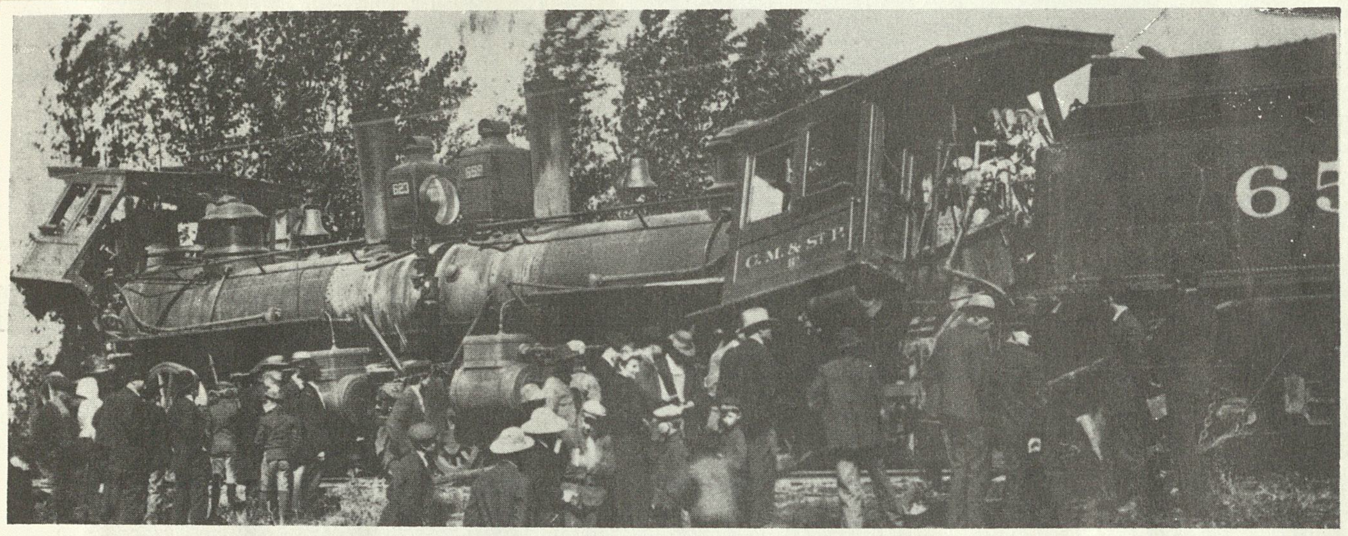
**CONNECTIONS.**—¹ With Steamers on Puget Sound, and Great Northern Ry. Line. ² With Seattle, Lake Shore & Eastern, and Canadian Pacific Rys.



**BELLINGHAM BAY & BRITISH COLUMBIA R.R.** engine "D. O. MILLS" was built by H. J. Booth & Co., San Francisco, in 1868. Bearded engineer is Billy Mann. (Courtesy of Fred Jukes, Blaine, Wn.)

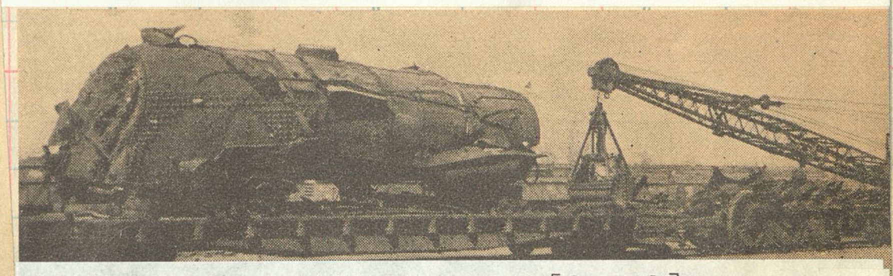


*Ten wheeler No. 7 working in tandem with No. 8 created this splendid action scene on Milwaukee's subsidiary, the Bellingham Bay and British Columbia RR. in 1904.*



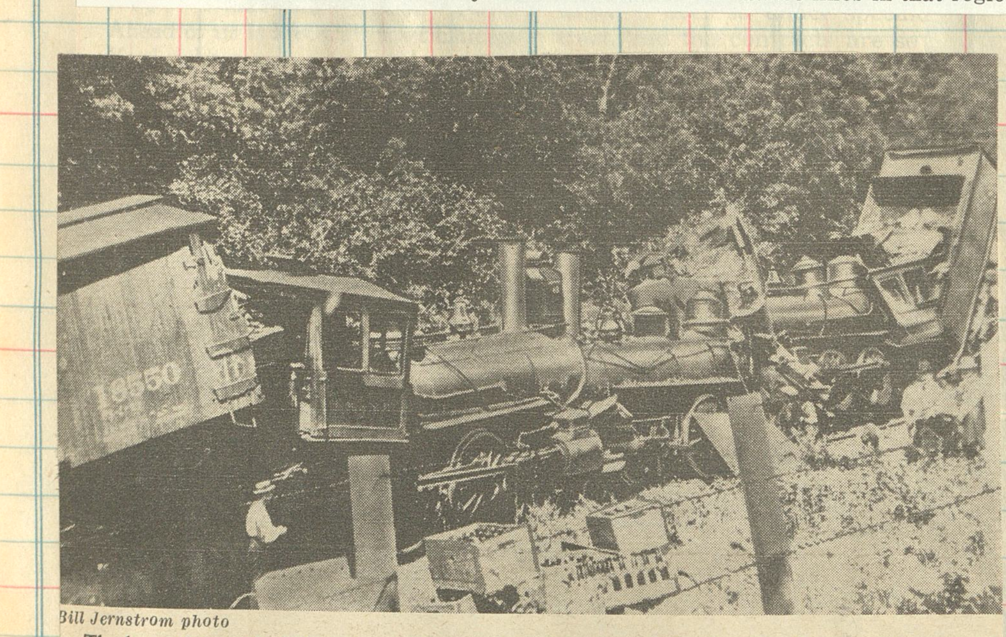
**CROWD OF CURIOUS SPECTATORS** gathered at Mitchell, South Dakota, to view the results of this head-on collision between Engines 623 and 659 of the Chicago, Milwaukee & St. Paul Railway. Engineer Sumner and Fireman Weiland were killed in this bad smash which occurred on October 7, 1907. Engine 623 was Rhode Island's Shop No. 971, built in May of 1881 as the 447; she was renumbered 623 in 1899, became the 323 in 1912 and was scrapped in 1926. Engine 659 was also a Rhode Island product, constructed in February, 1882, under Shop No. 1138. Originally bearing road number 552, she acquired number 659 in the general renumbering of April, 1899. Later she was renumbered 359 in 1912 and was scrapped in 1920. Although the engines do not appear to have incurred serious damage in the wreck shown here, the cabs of both locomotives are practically demolished. Mitchell, South Dakota, played an important role in the Milwaukee's operations; located on the north-south line running from Aberdeen, South Dakota, to Sioux City and other Iowa points, it was the jumping-off point for the extension west to Chamberlain and the Black Hills terminal of Rapid City. Another branch extended east from Mitchell into northern Iowa to join the network of Milwaukee lines in that region. (Collection of Dr. S. R. Wood)

RESULTS OF A HEAD-ON COLLISION ON THE MILWAUKEE IN 1910 OKM



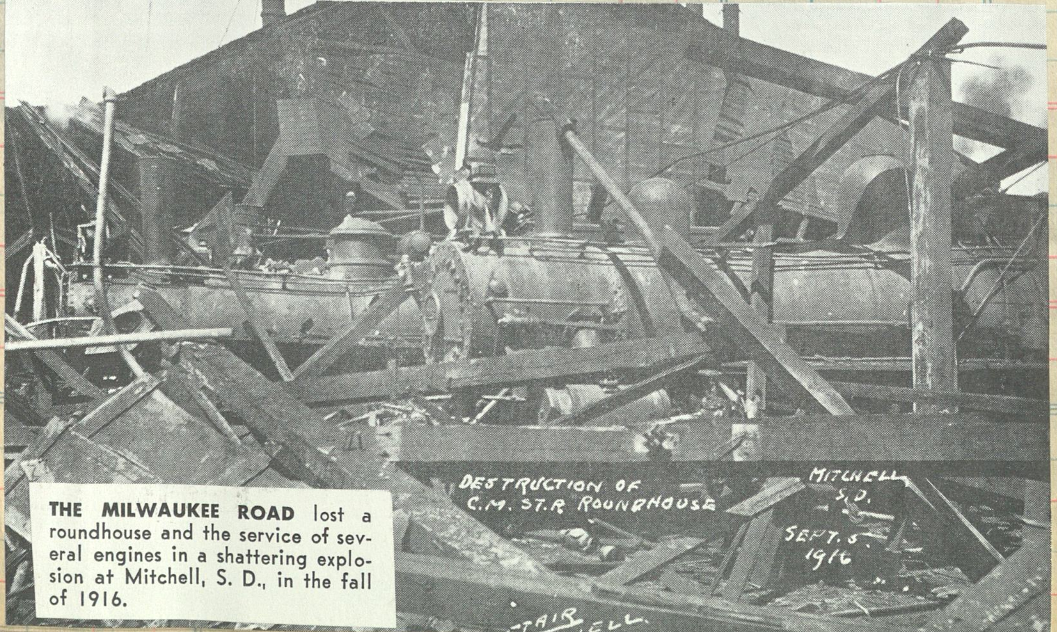
All that remained of #336 [2-8-2] after she committed suicide, boiler explosion, at Elgin, Ill Oct 1938

A pair of 2-8-0's. nos 378 & 417, failed when they tried to use the same track at Minnesota Falls, Mn [on the H&D Div] October 9, 1910

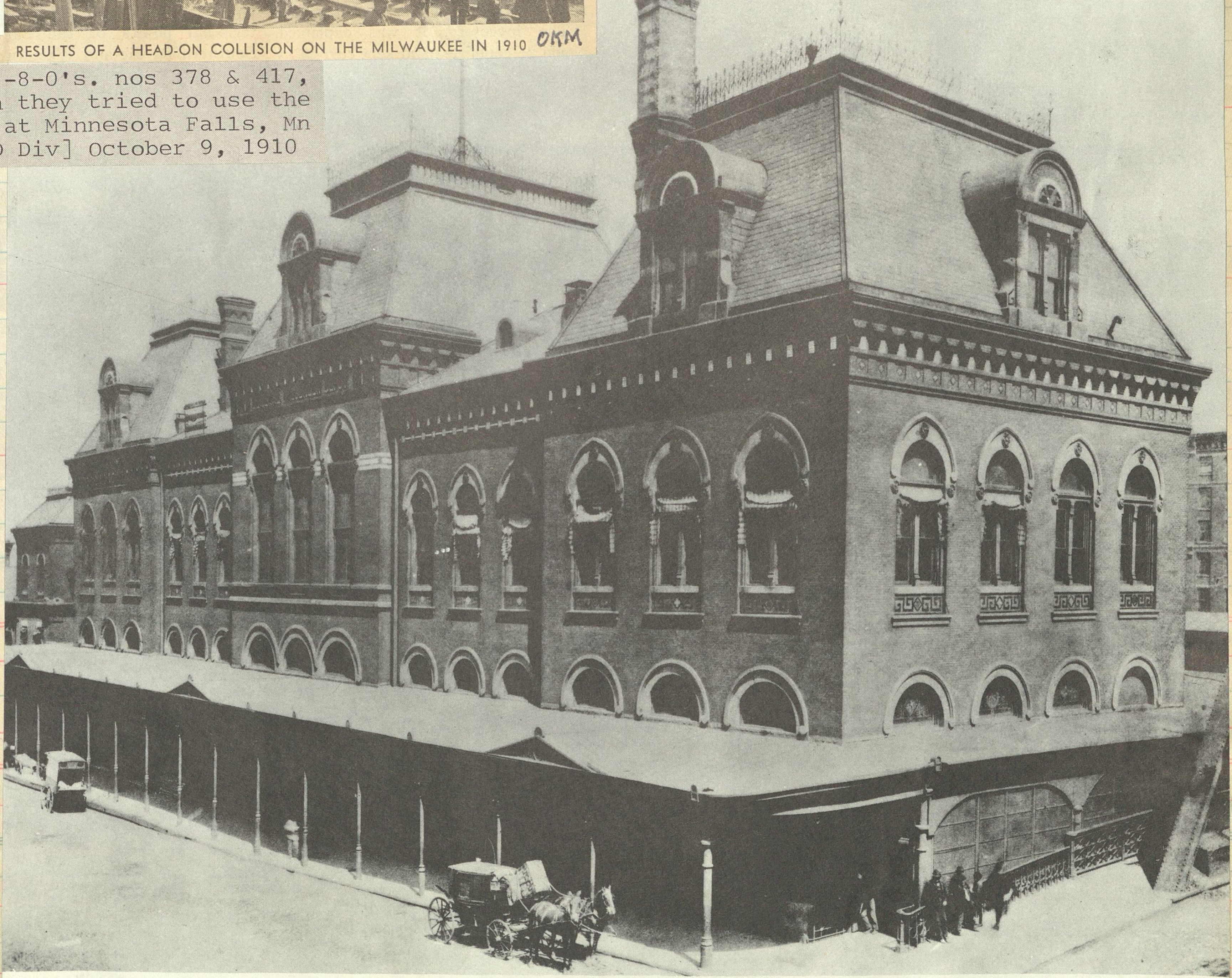


*Bill Jernstrom photo*

The brew that made Milwaukee famous and an infamous Milwaukee Road brew. Does any reader have data on this cornfield meet, said to have rocked the Wisconsin countryside around 1900? Outnumbered engine is the 49



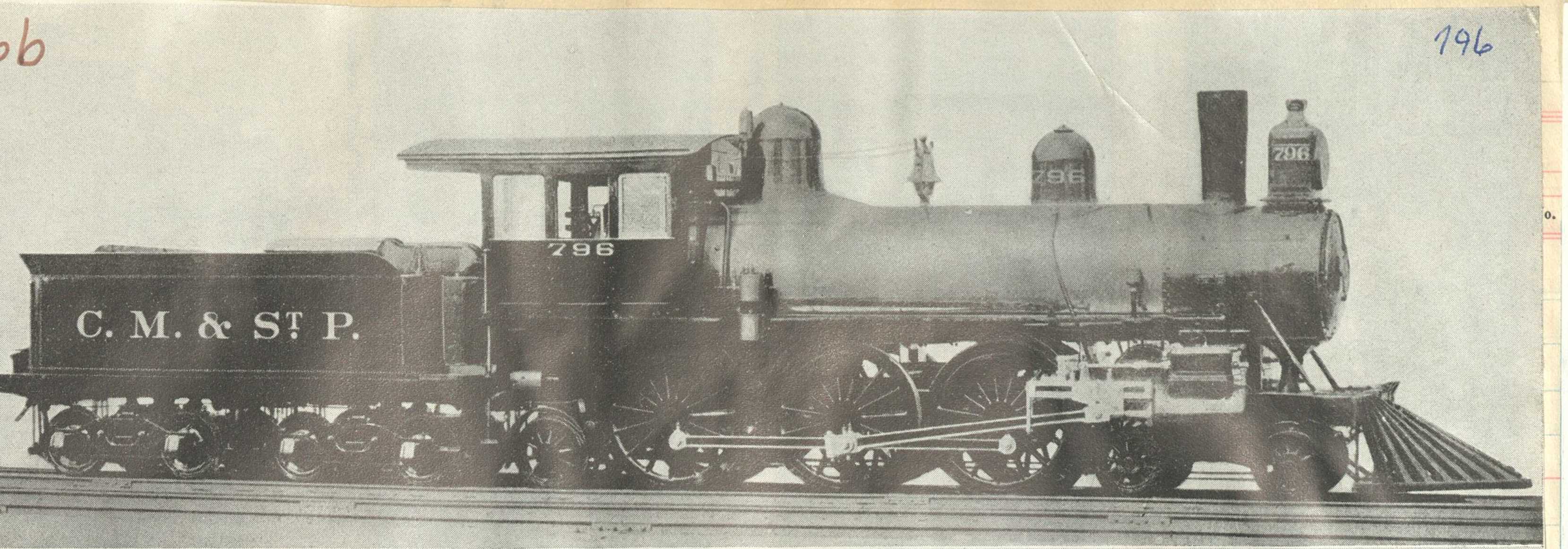
**THE MILWAUKEE ROAD** lost a roundhouse and the service of several engines in a shattering explosion at Mitchell, S. D., in the fall of 1916.

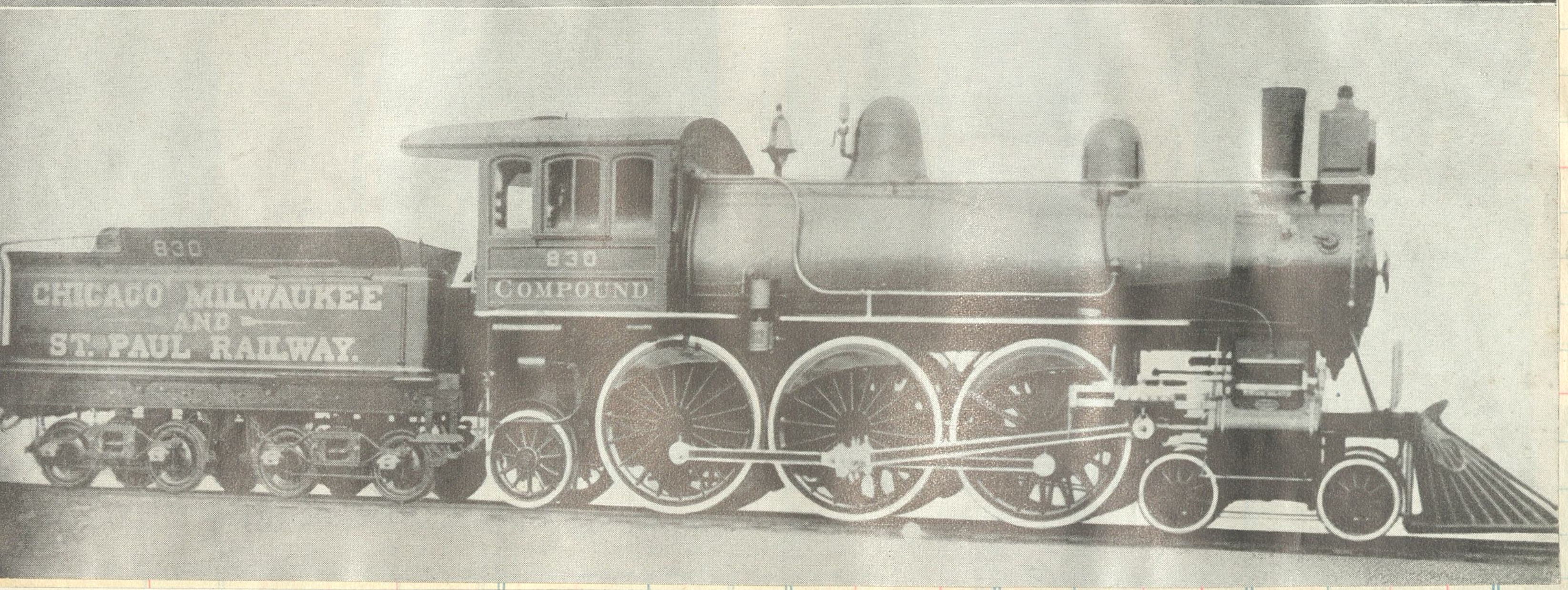


This photograph shows the south end of Union Station later in the 1880s. Chicago

6b

796

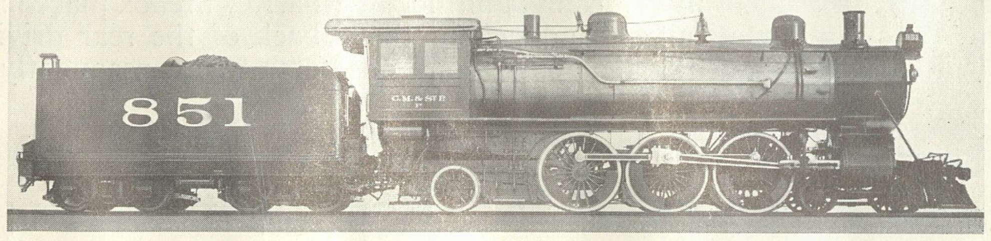




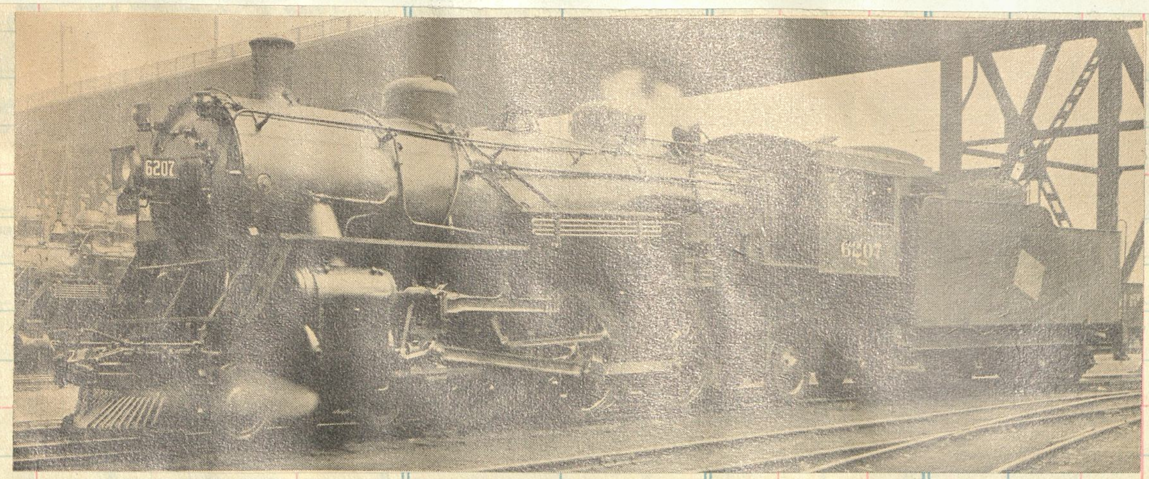
Only F-2 engine

| | |
|---|---|
| Cylinders | 23″ x 26″ |
| Drivers, diam. | 72″ |
| Steam pressure | 200 lb. |
| Grate area | 35.8 sq. ft. |
| Heating surface | 3382 sq. ft. |
| Weight on drivers | 130,500 lb. |
| “ total engine | 208,750 lb. |
| Tractive force | 32,600 lb. |

renoed 1501
6050



Pacific Type Locomotive, Class F2, Built at the Milwaukee Shops, 1905



Blt at Milwaukee Shops 1910 as CM&PS 3010, renoed CM&PS 6610, CM&StP 6207, CMStP&P 879

1502-1551
Brooks

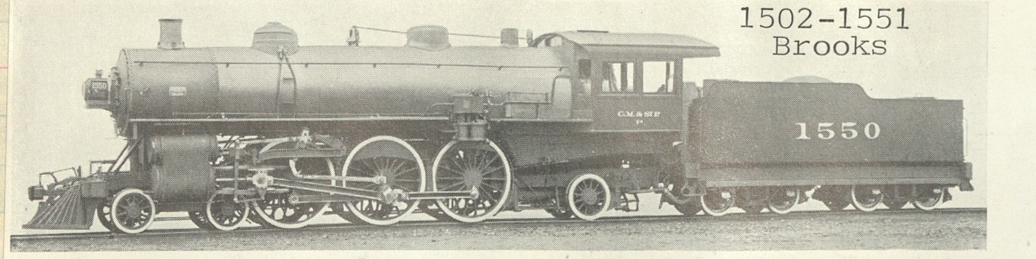


Photo furnished by American Locomotive Co.

Pacific Type Locomotive, Class F3-s, Built by the American Locomotive Company, 1910

| | |
|---|---|
| Cylinders | 23″ x 28″ |
| Drivers, diam. | 79″ |
| Steam pressure | 200 lb. |
| Grate area | 48.8 sq. ft. |
| Water heating surface | 2863 sq. ft. |
| Superheating surface | 620 sq. ft. |
| Weight on drivers | 157,200 lb. |
| “ total engine | 247,300 lb. |
| Tractive force | 31,870 lb. |

Originally built to use saturated steam.

The 192 still looks young after thirty years of service. She was one of fifty Pacifics delivered by Brooks in 1910 Class F-3s c/n 47484. Had nos 1544, 3242, CM&PS 6542, 6162, 192. Retired in November 1954

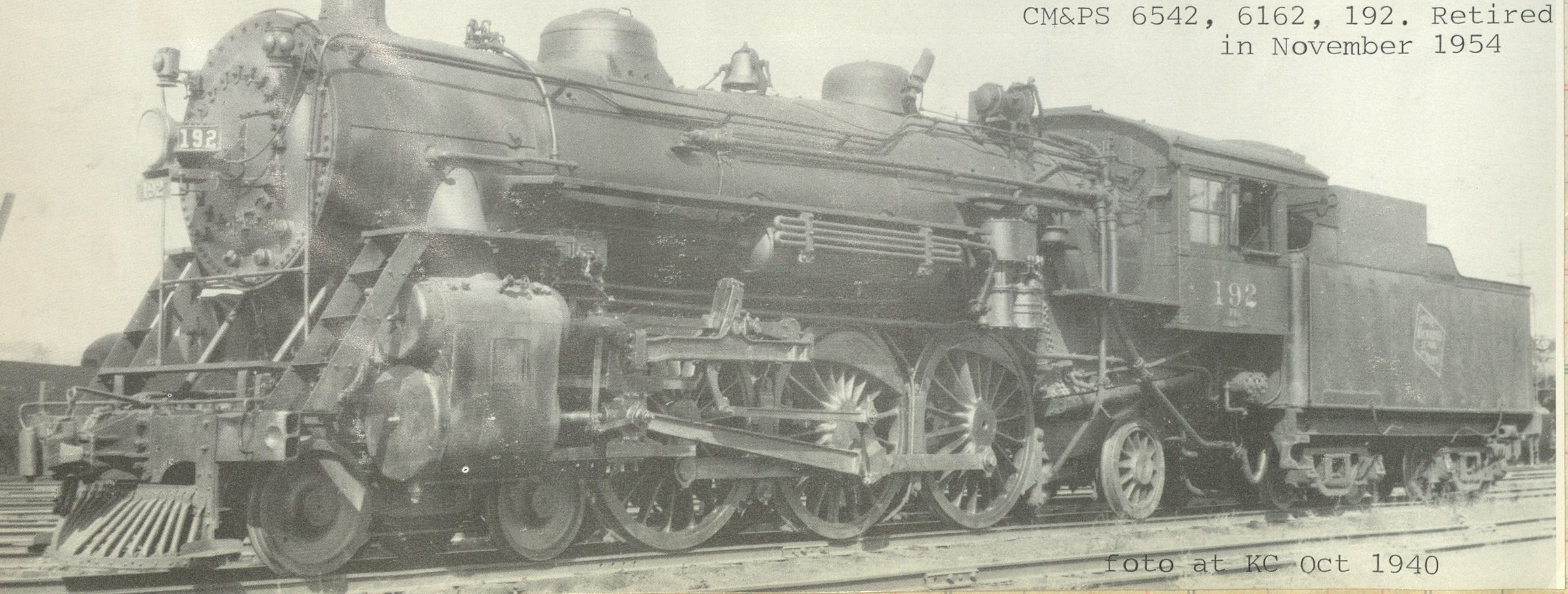
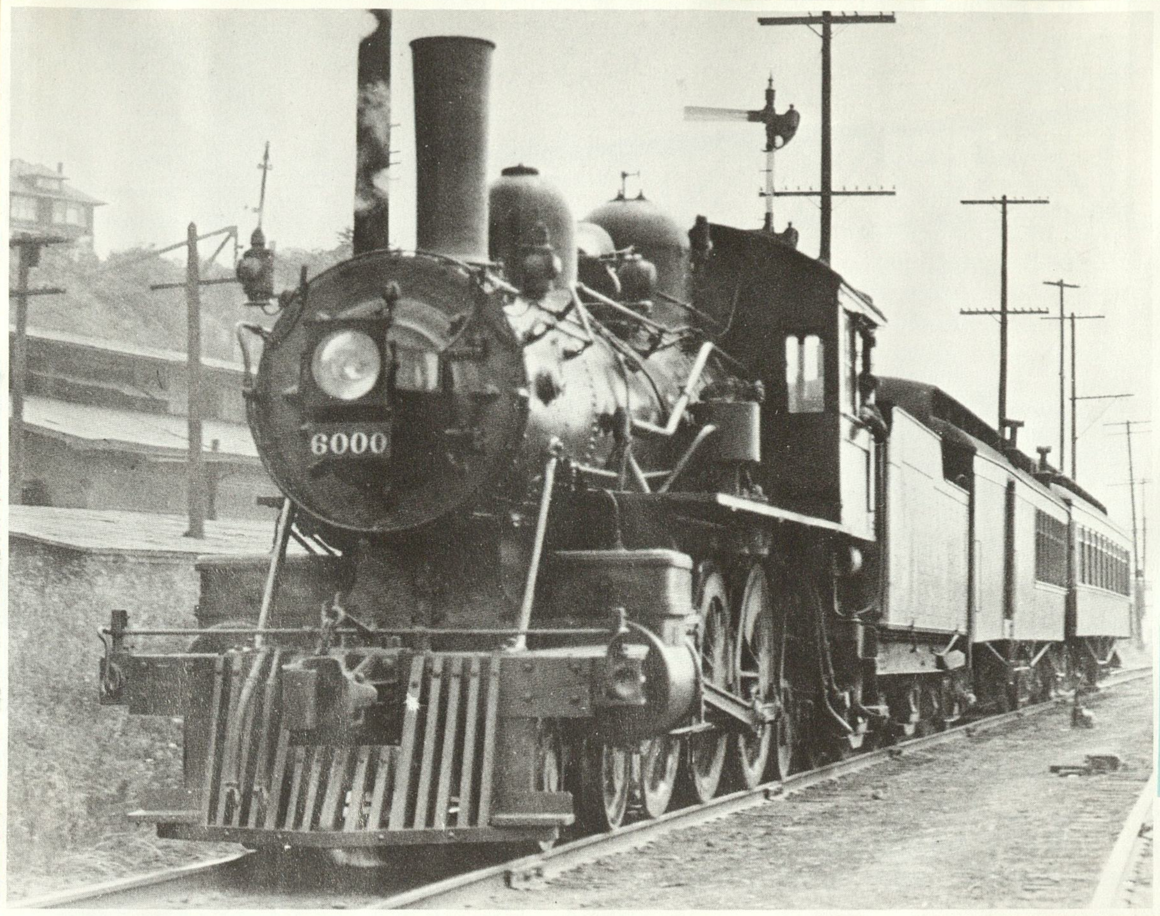


foto at KC Oct 1940

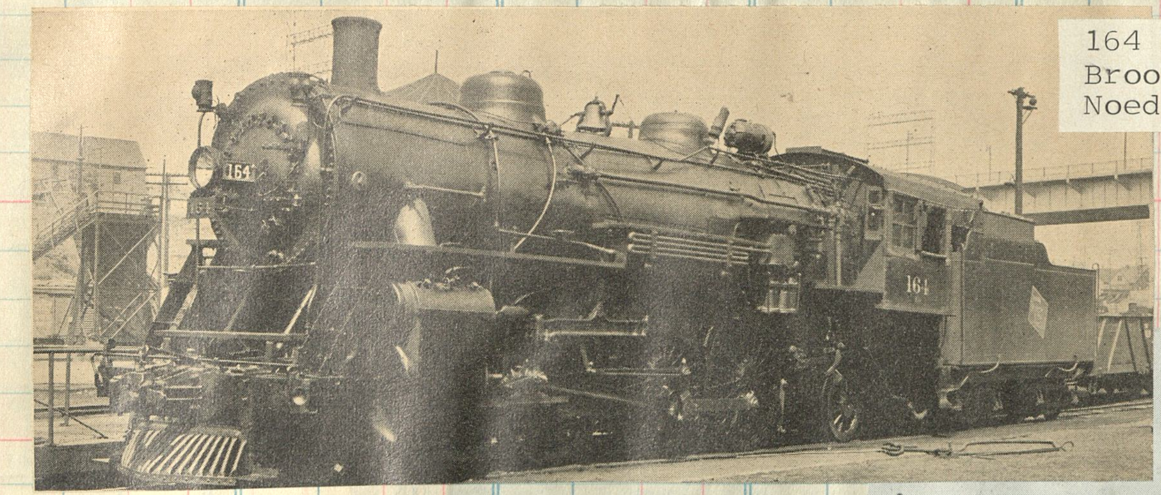


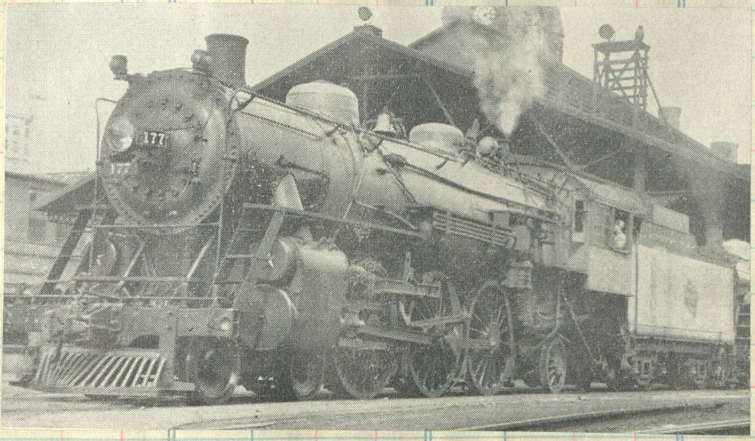
796

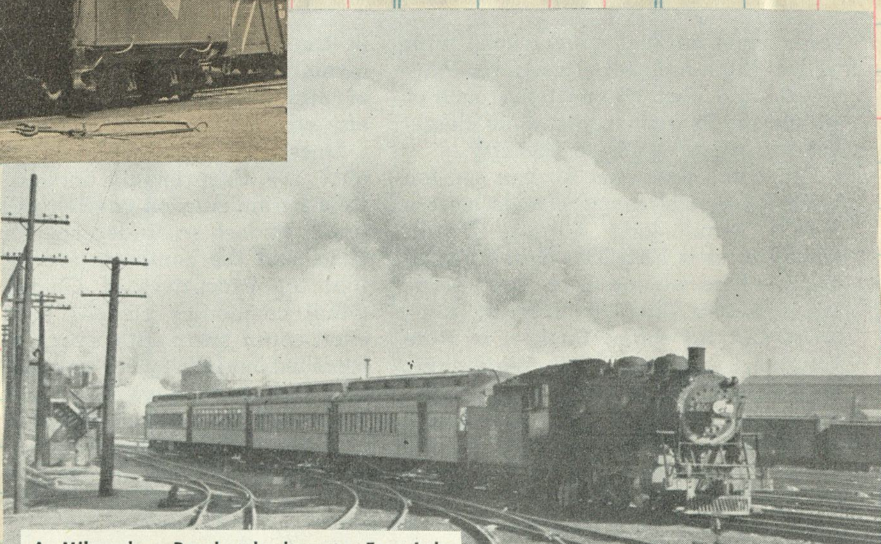
Pacific type blt at Schenectady in April 1889 con no 2855. Later noed 191, 850, 1500, 6000 (seen at ARG interlocking 1924) Rebuilt in 1926 as 4-6-0 noed 2185. Retired Dec 1930!

← The 830 was one of three engines built by Rhode Island in 1893. However, the R.I. records indicate they were constructed as 4-6-0 type and application of a trailer truck may have been an after thought at time the engines were delivered. Noed 828 c/n 2912, 829 c/n 2913, 830 c/n 2880. All were returned to the builder in 1900. Were rebuilt as simple engines and resold to the Plant System (Savannah, Florida & Western) and noed 104-106. In 1902 became Atlantic Coast Line nos 287-289. Later rebuilt as 4-6-0's as class K-13 and noed 1287-1289.

164 blt as 2nd #1518 by Brooks (c/n 48730) 1910
Noed 1518, 6116, 164

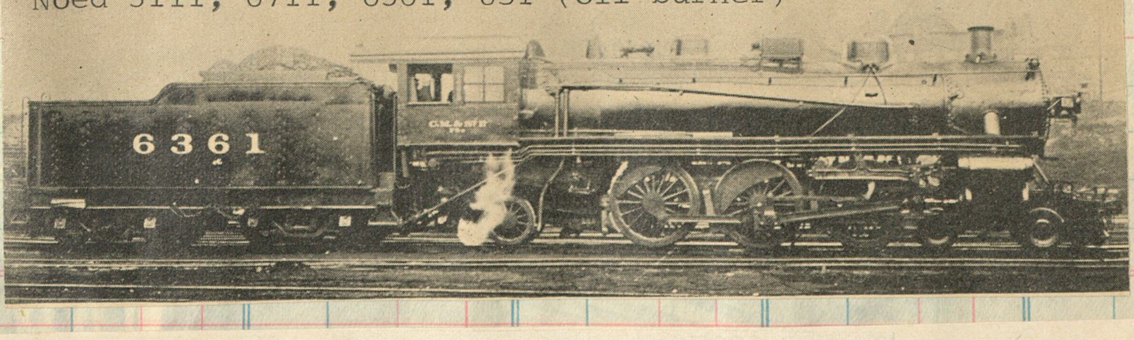




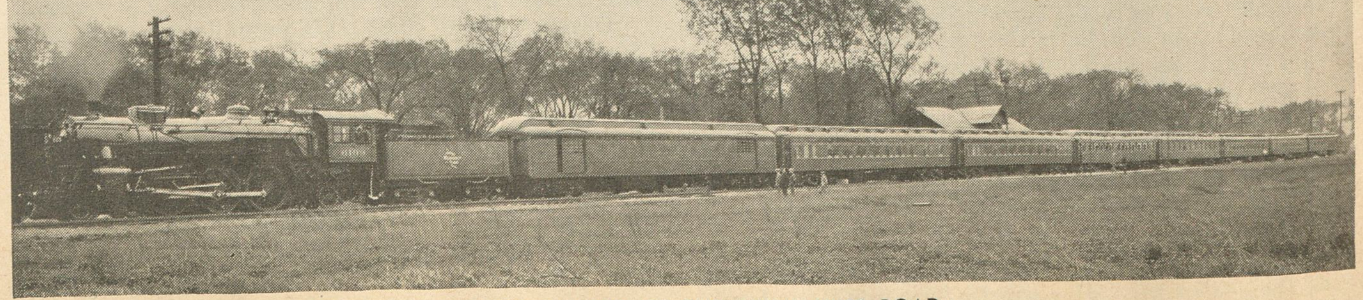


A Milwaukee Road suburban to Fox Lake rolls fast near Western Avenue, its F-5an Pacific No. 800 trailing a plume of smoke.

Milwaukee Shops 1912 6350-6364
Noed 3111, 6711, 6361, 851 (oil burner)



THE PIONEER LIMITED



PIONEER LIMITED OF THE MILWAUKEE ROAD

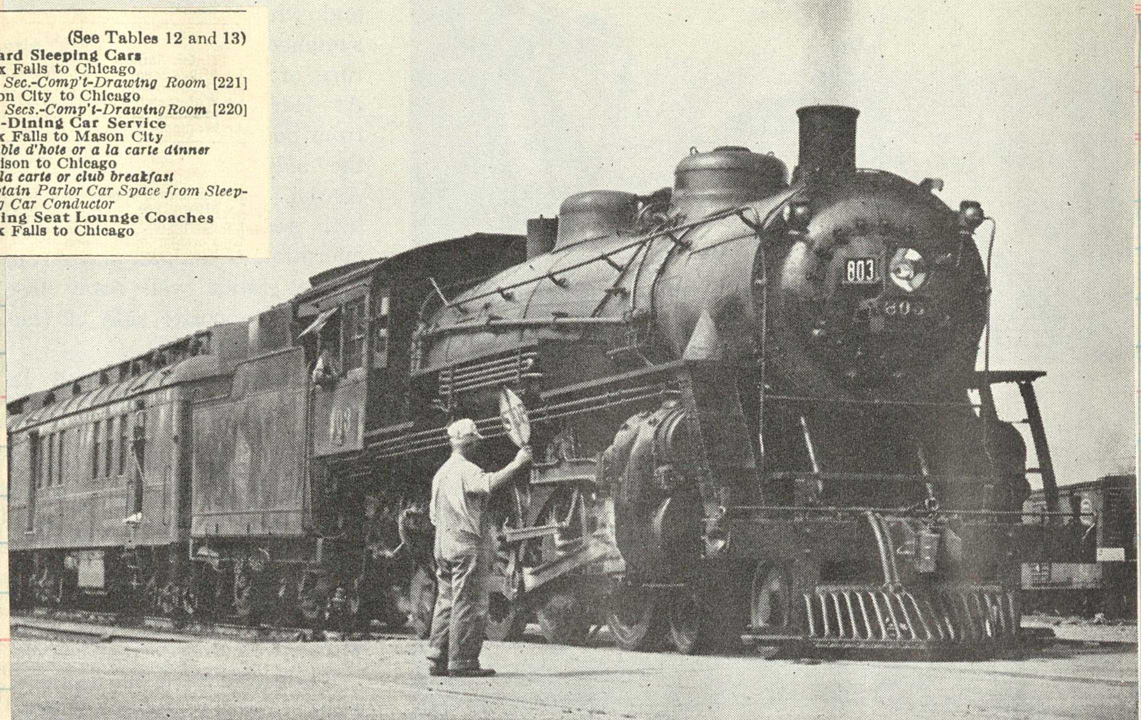
This crack train is pulled by locomotive 6109 of the Chicago, Milwaukee, St. Paul & Pacific between Chicago, Milwaukee and the Twin Cities (Minneapolis and St. Paul).

**★No. 22—THE SIOUX** (See Tables 12 and 13)

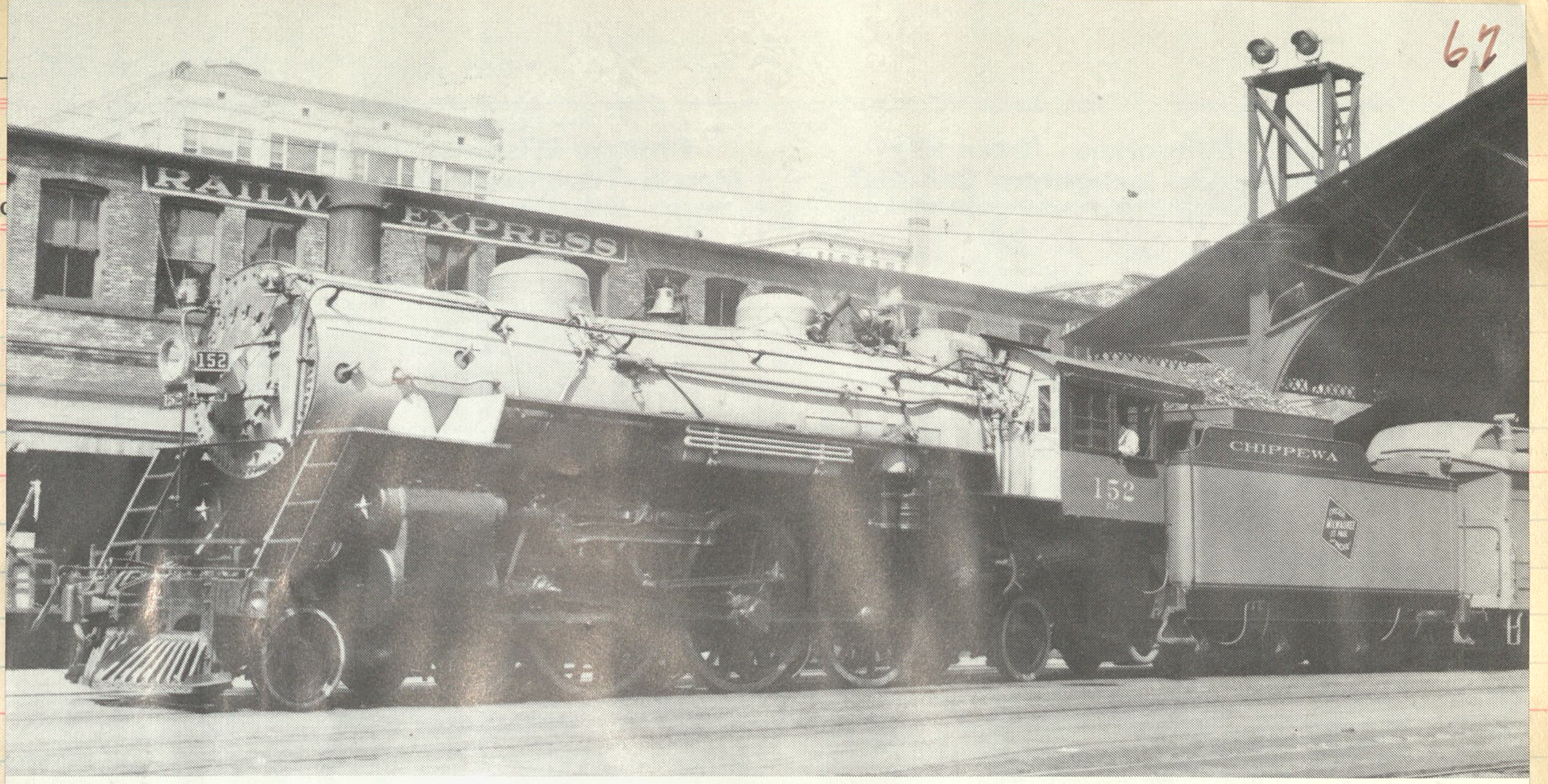
| *Milwaukee Road Station* | Daily |
|---|---|
| Lv Sioux Falls | 3.55PM |
| Lv Canton | 4.40PM |
| Lv Sheldon | 5.53PM |
| Lv Spencer | 7.05PM |
| Lv Algona | 8.27PM |
| Lv Mason City | 10.20PM |
| Lv Charles City | 11.02PM |
| Lv Calmar | 12.40AM |
| Lv Marquette | 2.22AM |
| Lv Madison | 5.20AM |
| Lv Janesville | 6.36AM |
| Lv Walworth | 7.09AM |
| Ar Chicago | 8.50AM |

**Standard Sleeping Cars**
Sioux Falls to Chicago
*10 Sec.-Comp't-Drawing Room* [221]
Mason City to Chicago
*10 Secs.-Comp't-Drawing Room* [220]
**Parlor-Dining Car Service**
Sioux Falls to Mason City
*Table d'hote or a la carte dinner*
Madison to Chicago
*A la carte or club breakfast*
*Obtain Parlor Car Space from Sleeping Car Conductor*
**Reclining Seat Lounge Coaches**
Sioux Falls to Chicago

No 22, the "SIOUX" departs Sioux Falls



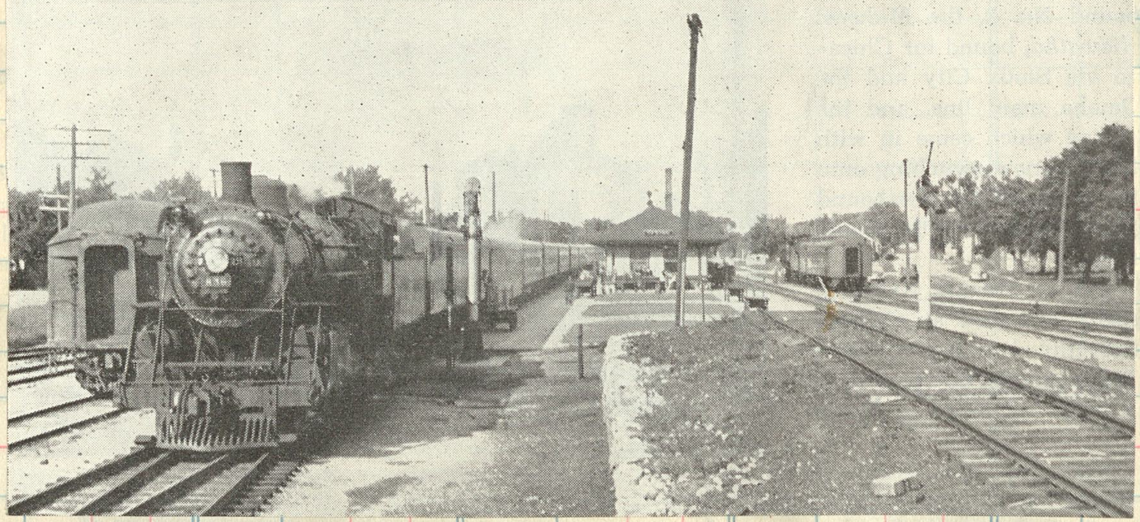
#803, former 1525, 6303 Brooks [c/n 51137] 1912



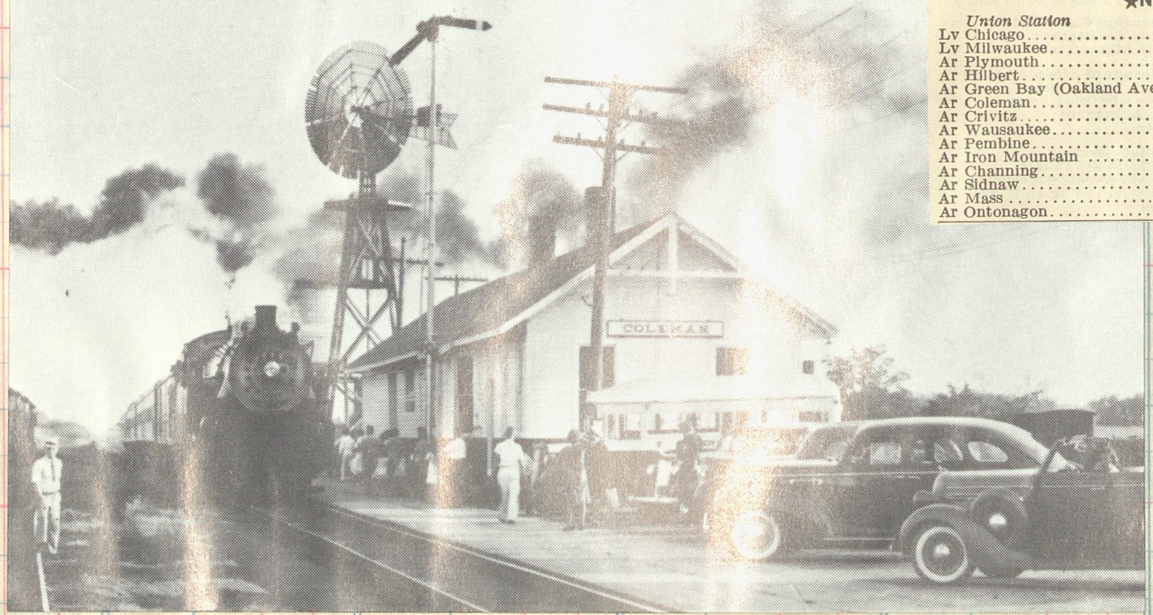
collection of R. M. Clark

*Class F-3 Pacific 152 (originally 6160) presents a striking appearance in the special light orange, maroon, grey and black livery. This paint scheme was also applied to 177 (6139) and 197 (6168). In this photo, No. 21 is ready to leave Milwaukee on May 6, 1939.*

Eng 838 on #2, the "Midwest Hiawatha" at Canton, S.D.



No 21 arrives at Coleman, Wis [1938]



**★No. 21—THE CHIPPEWA** (See Table 20)

| *Union Station* | Daily |
|---|---|
| Lv Chicago | 12.55PM |
| Lv Milwaukee | 2.12PM |
| Ar Plymouth | 3.17PM |
| Ar Hilbert | 4.00PM |
| Ar Green Bay (Oakland Ave.) | 4.40PM |
| Ar Coleman | 5.41PM |
| Ar Crivitz | 6.00PM |
| Ar Wausaukee | 6.16PM |
| Ar Pembine | 6.45PM |
| Ar Iron Mountain | 7.10PM |
| Ar Channing | 8.00PM |
| Ar Sidnaw | 9 25PM |
| Ar Mass | 10.12PM |
| Ar Ontonagon | 11.00PM |

**Observation Parlor Car**
Chicago to Ontonagon

**Dining-Buffet Service**
Chicago to Ontonagon
*50c luncheon, 65c dinner, also a la carte service.*

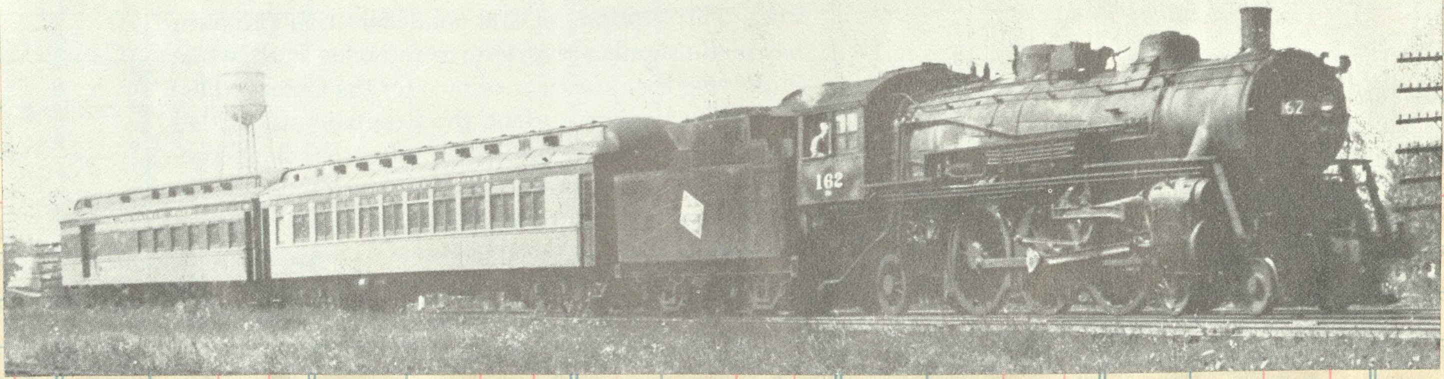
**Luxury Lounge Coaches**
Chicago to Ontonagon

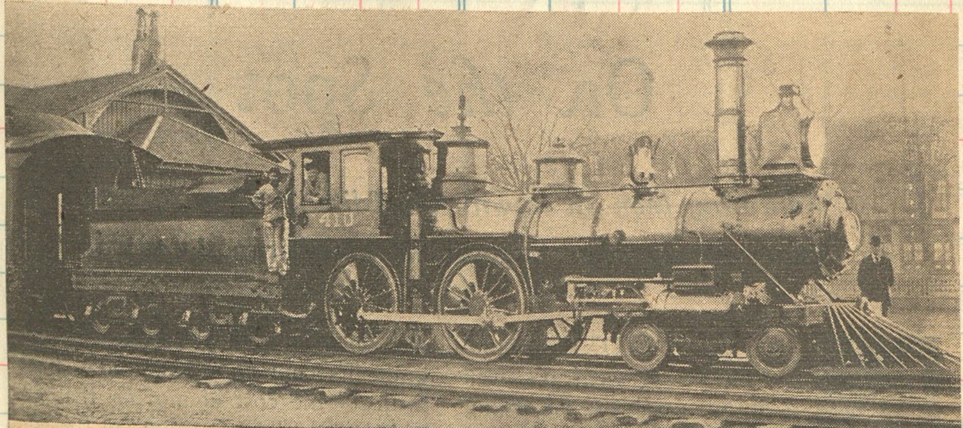
Chippewa

W. R. McGee

MILWAUKEE ROAD'S ENGINE 220 WITH FREIGHT DRAG NEAR TERRY, MONT.

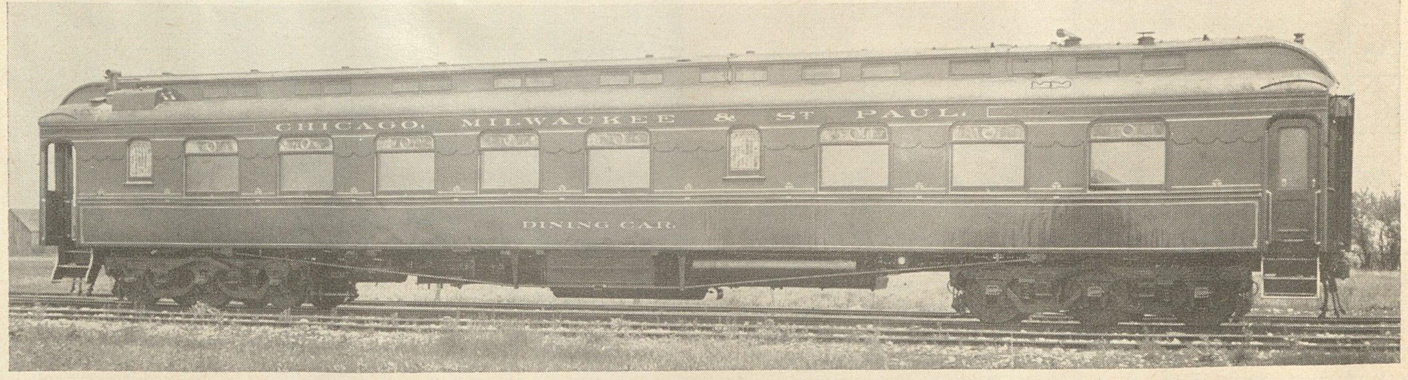
Trn 242 enroute to Chicago



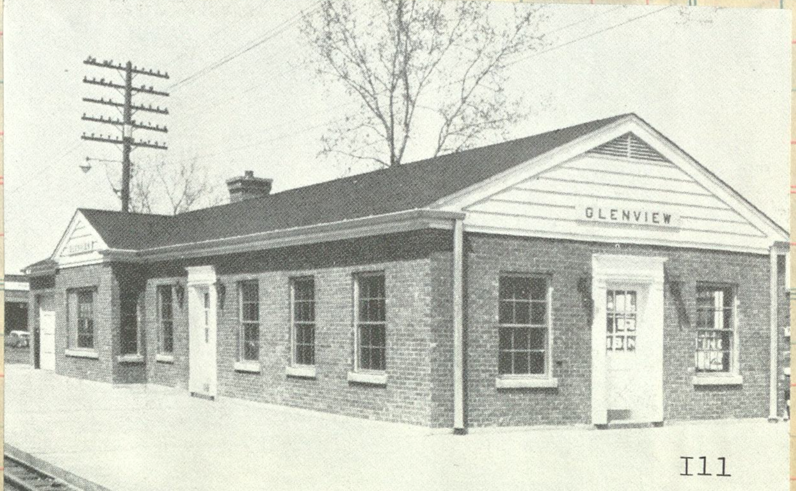


OLD PHOTO of CM&StP No. 410, a Manchester engine, taken at Clinton, Iowa, in 1891, comes from T. V. Maguire, 1712 Douglas St., Rockford, Ill., whose father, John Maguire, was killed in a head-end collision in 1907

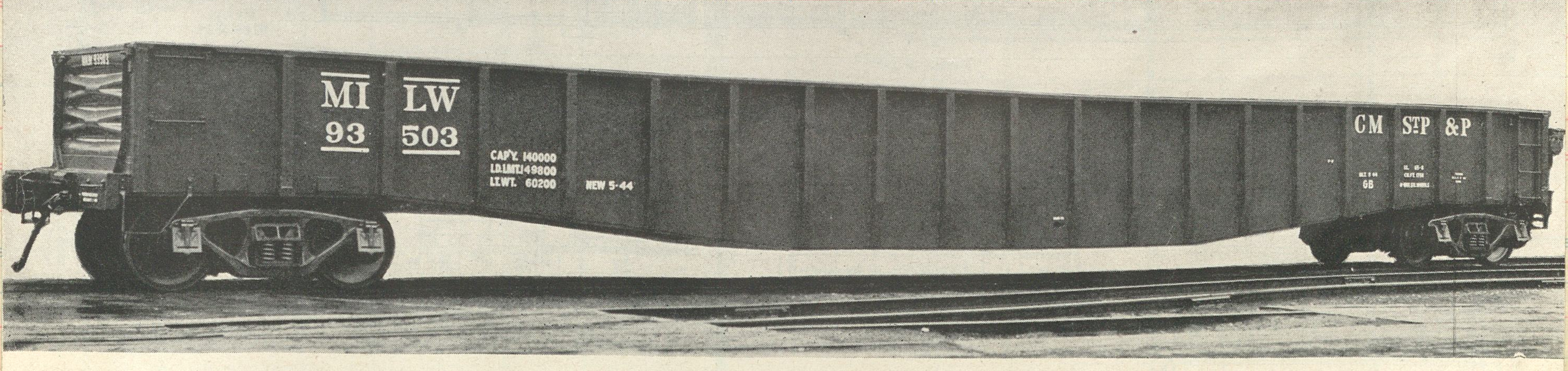
Built for the Chicago, Clinton, Dubuque & Minnesota by Manchester 1871 [c/n 374] as #7 "Gen Booth". To CM&StP #410, 1413



**PULLMAN** built 4500-series diner in 1908 and it was among the last wooden cars constructed for the St. Paul's Pioneer Limited.



I11

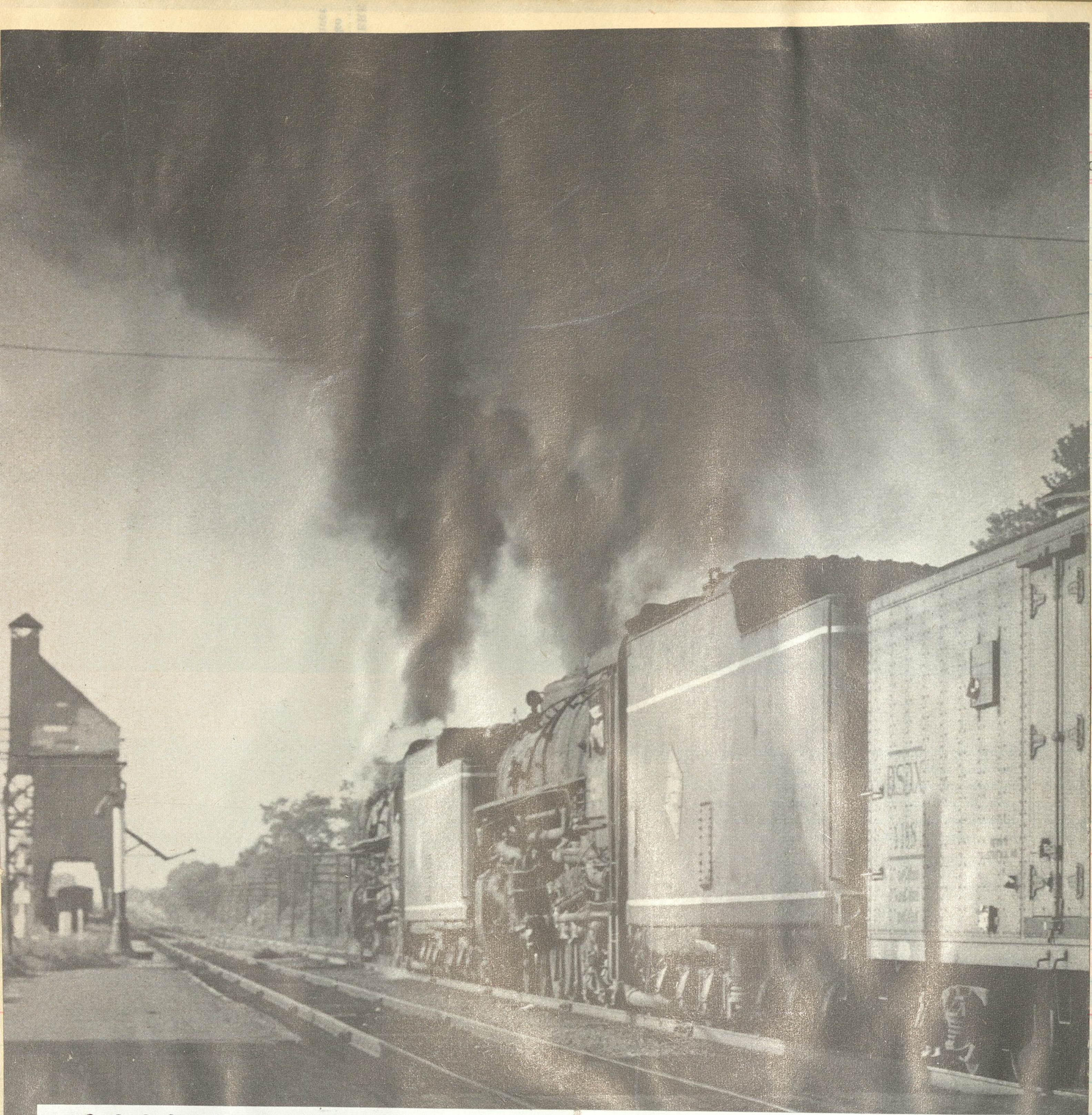


Chicago, Milwaukee, St. Paul & Pacific 70-ton, 65 ft. 6 in., welded-steel gondola car with drop ends and wood floor for mill trade. Series 93,500-93,534, A. A. R. Class GB. Built at railroad shops, Milwaukee.

Inside, length 65 ft. 6 in.; width 7 ft. 8 in.; sides 3 ft. 6 in.; capacity, 1,758 cu. ft.; light weight, 60,200 lb.; load limit, 149,800 lb.

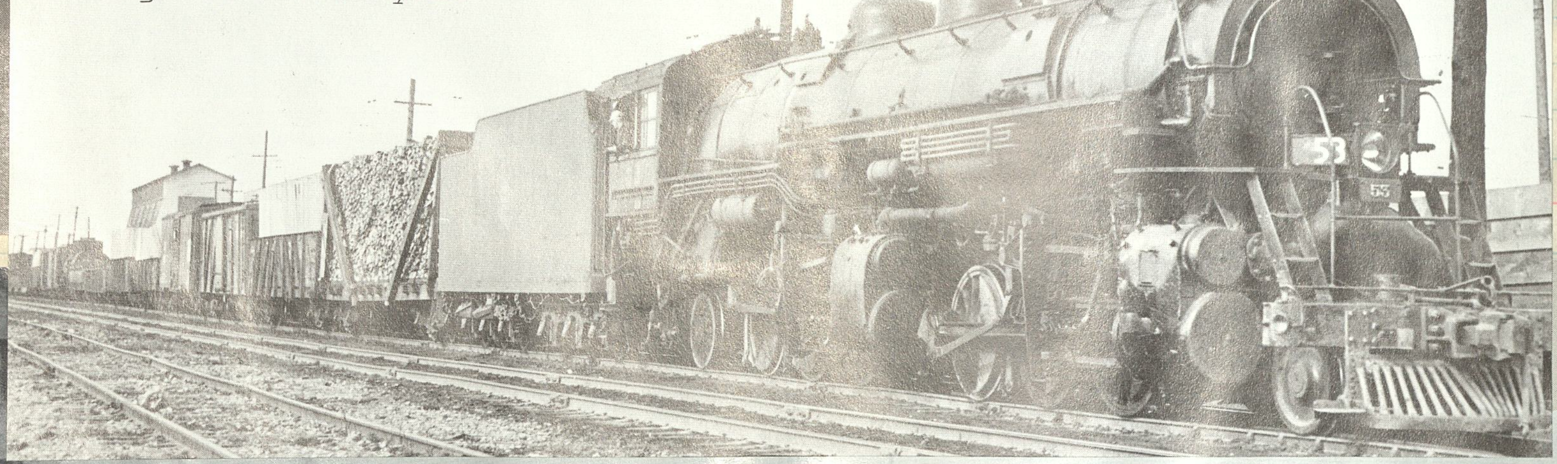
S AT

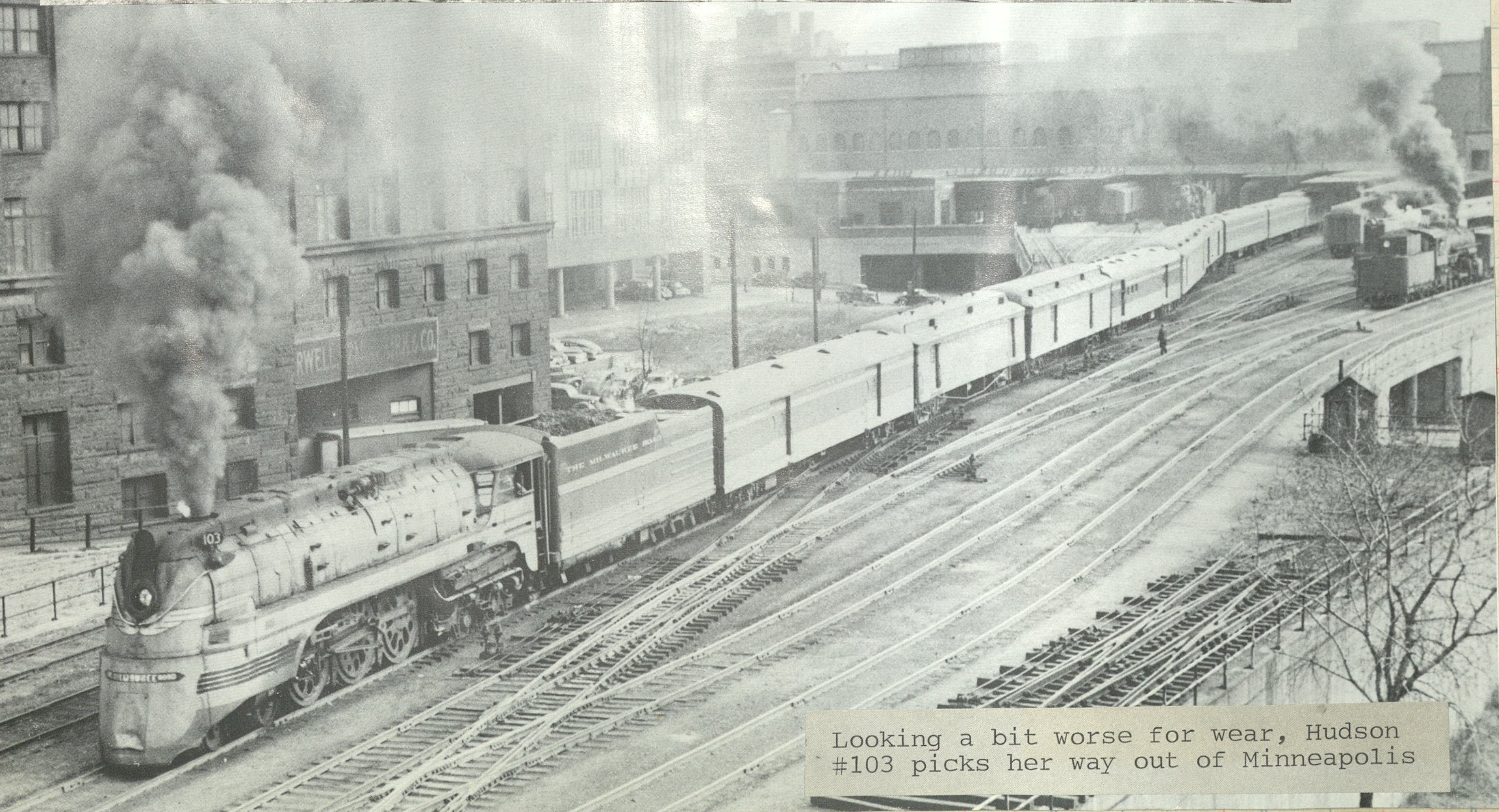
Amount Clos. No. Sold Amount Clos. No. Sold Amount



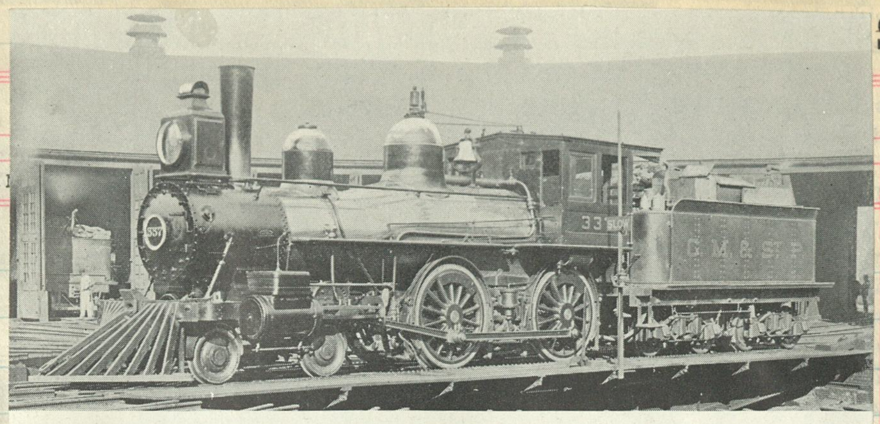
A pair of S-2 4-8-4's expedite northbound Tonnage thru Sturtevant, Wis.

2-6-6-2 #53 entered service as CM&PS #5003 [5000-5016 Schen 1910] in 1912 renoed CM&StP 9503, 9303 to CMStP&P 53. Shown here with tonnage in Tacoma yard





Looking a bit worse for wear, Hudson #103 picks her way out of Minneapolis



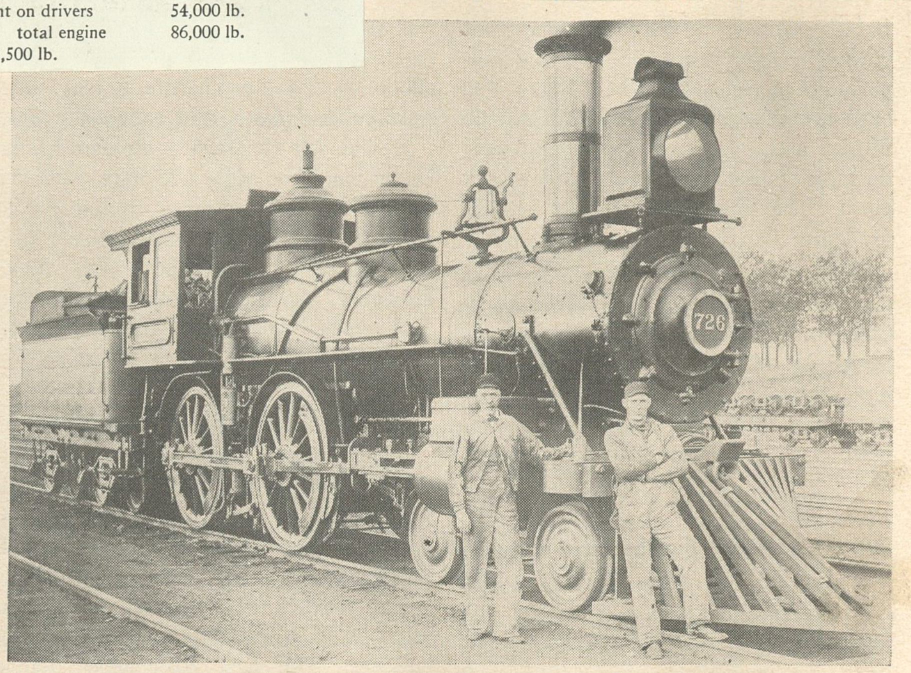
American Type Locomotive, Built at Milwaukee Shops, 1893

| | | | |
|---|---|---|---|
| Cylinders | 16" x 24" | Grate area | 17.5 sq. ft. |
| Drivers, diam. | 62" | Weight on drivers | 54,000 lb. |
| Steam pressure | 160 lb. | " total engine | 86,000 lb. |
| | Tractive force | 13,500 lb. | |

726

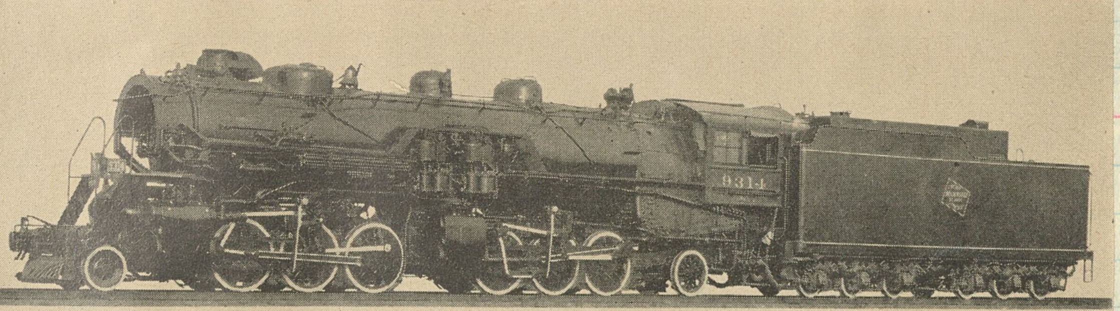
Ten engines blt by Cooke 1887, noed 721-730

c/n 1759 renoed 566, 516



PROUD OLD ENGINE 726 OF THE MILWAUKEE ROAD

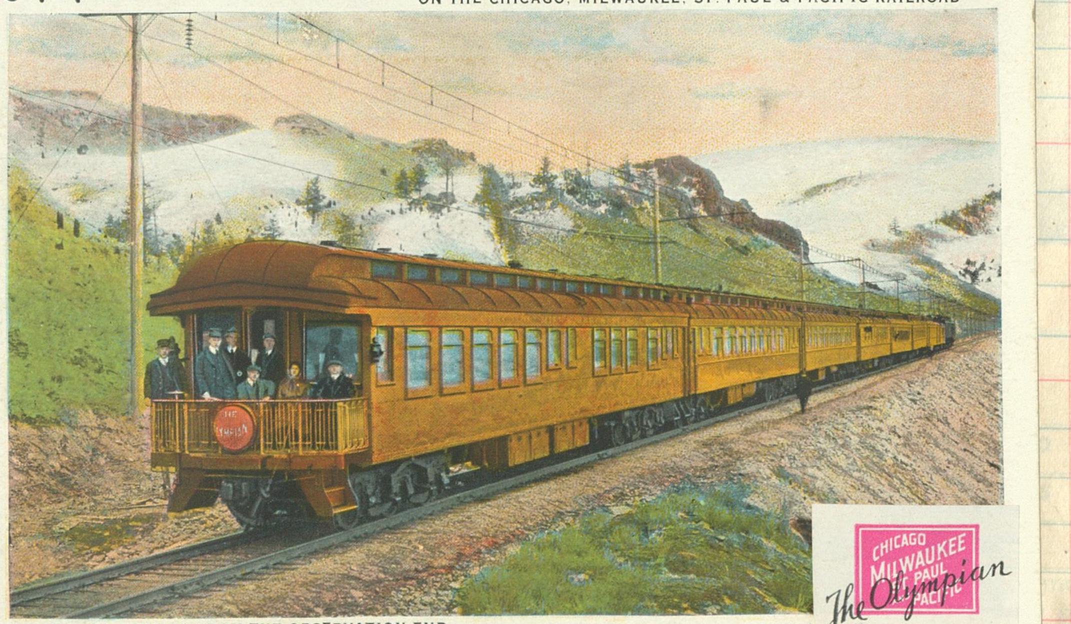
This locomotive, built by Cook in the early '80s, was used on a daily run between Portage and Milwaukee, Wis. The engineer standing beside the cylinder is the late Brother Michael O'Connor, Div. 66,



9314 blt by Schenectady 1910 c/n 48852 as CM&PS 5014 renoed 9514. Reblt, as shown, noed 9314. Last as #64

OKM

"ON THE CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD"


CHICAGO MILWAUKEE ST. PAUL AND PACIFIC
The Olympian

"THE OLYMPIAN" FROM THE OBSERVATION END

## FAMOUS TRAINS

**THE OLYMPIAN**—Tacoma—Seattle—Spokane—Butte—Yellowstone Park—Minneapolis—St. Paul—Milwaukee—Chicago. The World's Longest, Continuous Electrified Ride—sootless, cinderless, fumeless. Over four mountain ranges. Scenically supreme.

**THE PIONEER LIMITED**—leader of the finest fleet between Minneapolis—St. Paul—La Crosse—Milwaukee—Chicago.

**THE ARROW**—Omaha—Sioux City—Des Moines—Milwaukee—Chicago.

**THE SOUTHWEST LIMITED**—Kansas City—Excelsior Springs—Davenport—Milwaukee—Chicago.

**THE SIOUX**—Rapid City—Mitchell—Sioux Falls—Mason City—Chicago.

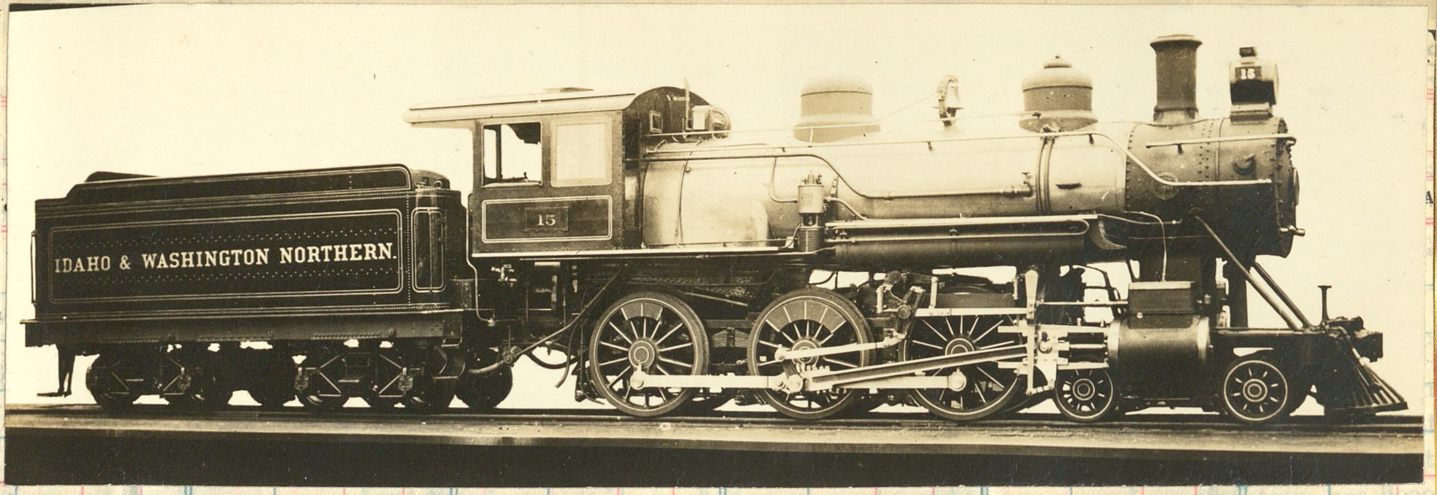
**THE COPPER COUNTRY LIMITED**—Calumet—Houghton—Sault Ste. Marie—Iron River—Milwaukee—Chicago.

**THE TOMAHAWK**—Star Lake—Minocqua—Merrill—Wausau—Milwaukee—Chicago.

*The* MILWAUKEE ROAD
*America's Longest Electrified Railroad*

1939

| Mls. | Table 83<br>*Pacific Time*<br>I&WN | Alti-tude |
|---|---|---|
| 0 | Lv ‖**Spokane, Wash.** Ar | 1902 |
| 7 | ....Dishman.... | 1990 |
| 12 | ...Greenacres▲... | 2040 |
| 18 | Spokane Bridge▲.. | 2065 |
| 22 | McGuires, Idaho▲ | 2146 |
| 23 | **Grand Junction**▲ | 2144 |
| 30 | .. **Rathdrum**▲... | 2199 |
| 34 | .. Twin Lakes▲... | 2387 |
| 37 | ....Seasons▲.... | 2416 |
| 41 | .....Jenida▲..... | 2590 |
| 44 | ...Spirit Lake... | 2486 |
| 48 | ....**Coleman**▲... | 2303 |
| 51 | ...Blanchard▲... | 2277 |
| 57 | .Tweedie, Wash ▲. | 2277 |
| 66 | ....**Newport**.... | 2124 |
| 72 | ....Wolfred▲.... | 2067 |
| 78 | ....Dalkena▲.... | 2071 |
| 83 | ......Usk▲...... | 2056 |
| 85 | .....Cusick..... | 2056 |
| 91 | .....Locke▲..... | 2056 |
| 95 | .....Jared▲..... | 2061 |
| 100 | ....Ruby▲...... | 2070 |
| 104 | ....Blueslide▲.... | 2067 |
| 108 | ...Lost Creek▲... | 2066 |
| 113 | .....Tiger▲..... | 2093 |
| 117 | ......Ione...... | 2095 |
|  | *Box Canyon.* |  |
| 128 | Ar. **Metaline Falls**. Lv | 2111 |

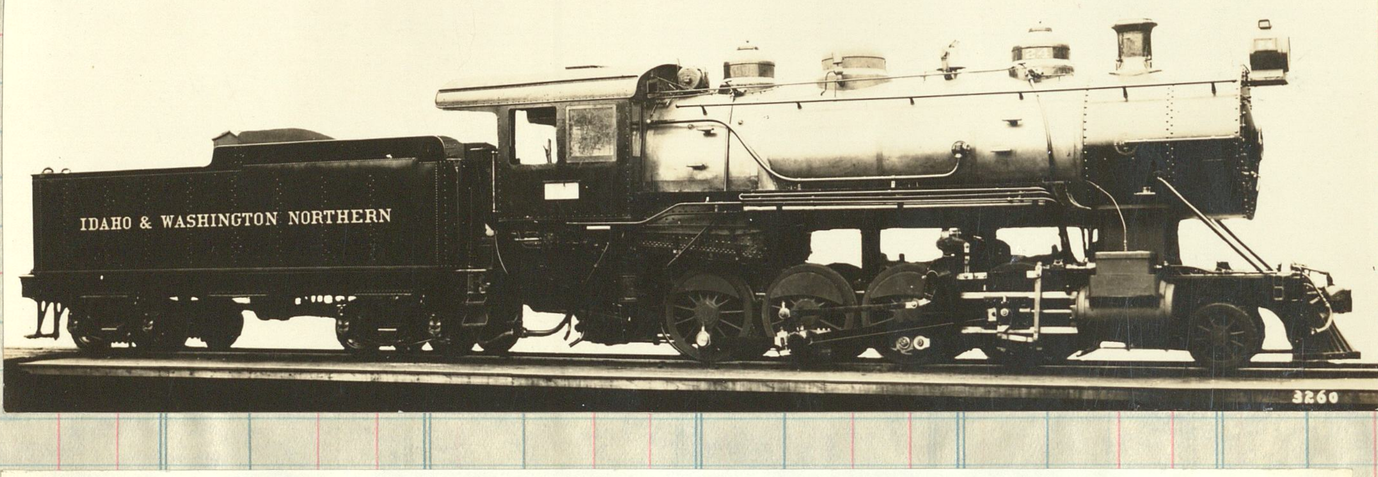

IDAHO & WASHINGTON NORTHERN
15

Blt by Baldwin (c/n 31648) in 1907. to CM&StP 2715 in 1916

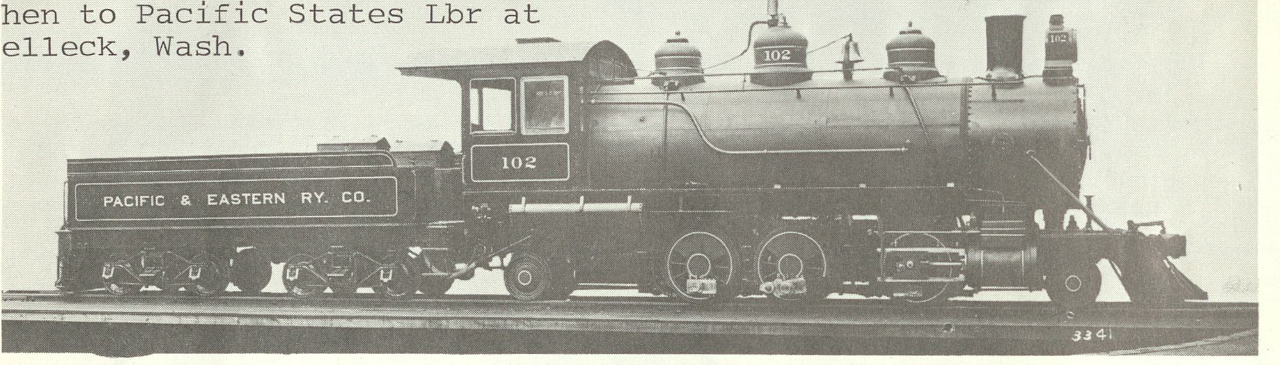
Sunset of the Milwaukee ?
End of an empire!!

Harper, Ill

#24 blt by Baldwin 1910 c/n 34526. To CM&StP 7558 in 1916

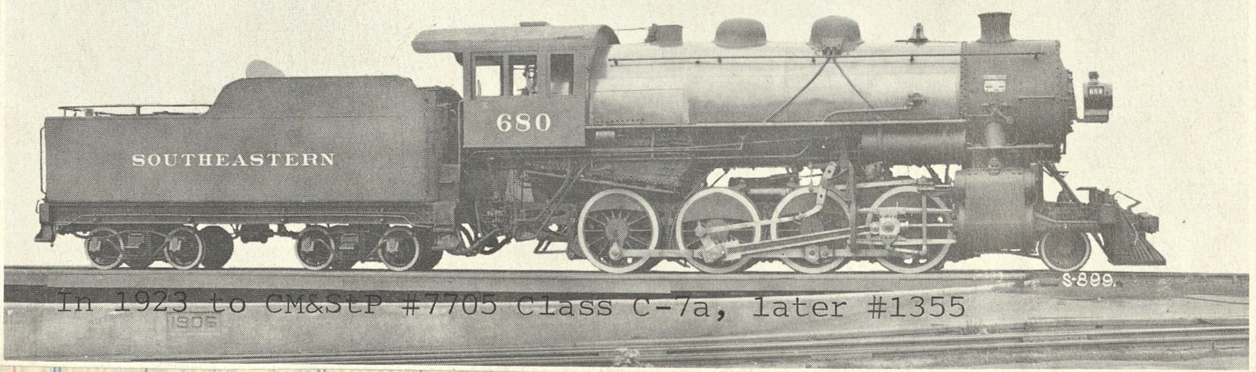

IDAHO & WASHINGTON NORTHERN
3260

In 1913 became Puget Sound & Willapa Harbor #102, to St Paul #5100
in 1918. Sold to Cascade Timber in 1927
then to Pacific States Lbr at
Selleck, Wash.


PACIFIC & EASTERN RY. CO.
102
3341

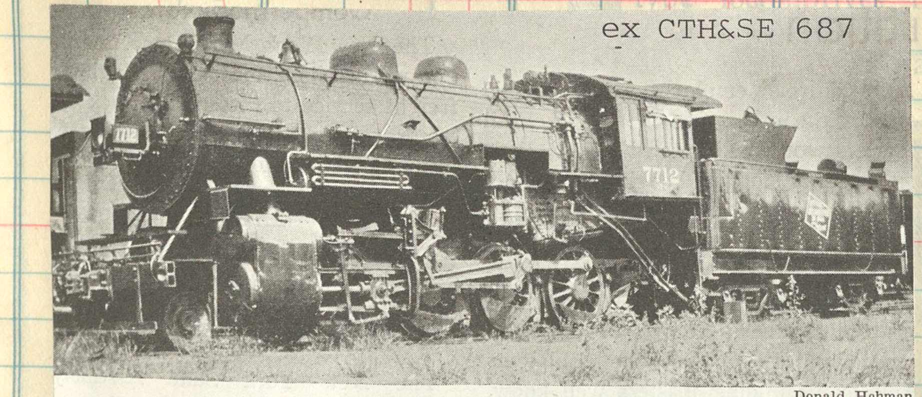
Pacific & Eastern #102, 1910, 2-6-2 type. Baldwin C/n 34918

Chicago, Terre Haute & Southeastern 680-684 Schen 1912
c/n 51653


SOUTHEASTERN
680
S-899
1905

In 1923 to CM&StP #7705 Class C-7a, later #1355

ex CTH&SE 687

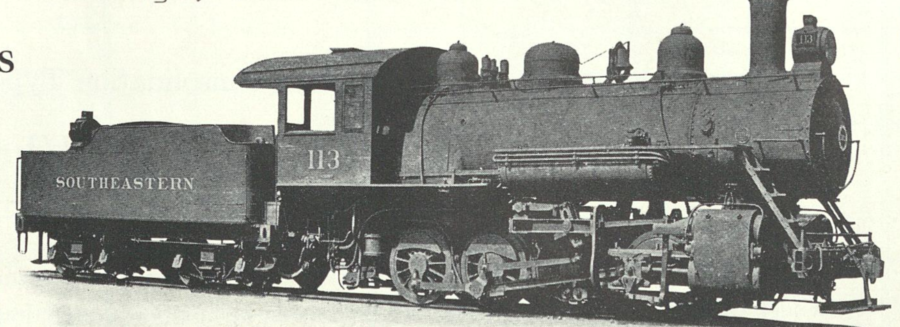


Donald Hehman

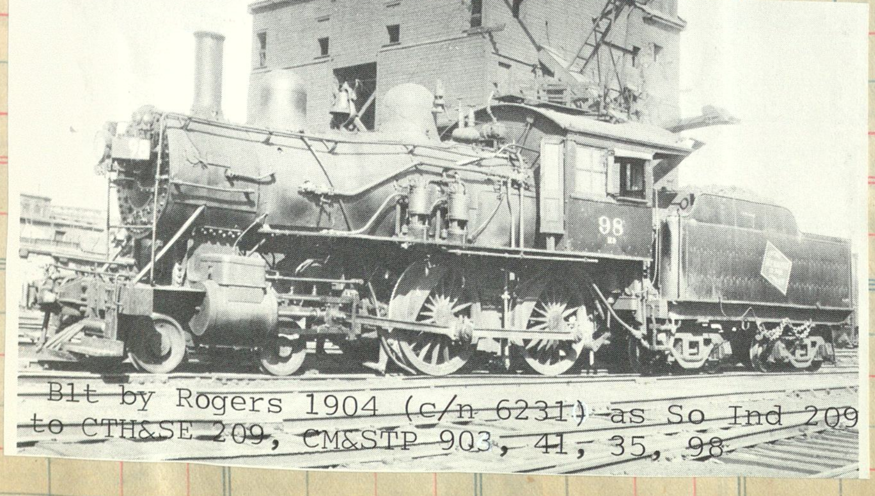
A MILWAUKEE ENGINE WITH A HISTORY

Engine 7712 used to be 687 on the Chicago, Terre Haute & South Eastern Railroad before that road was taken over by the Milwaukee Road. Its tank was cut down to increase visibility and safety in switching operations. It is a Consolidated type, built by the American Locomotive Works.

Chicago, Terre Haute & Southeastern

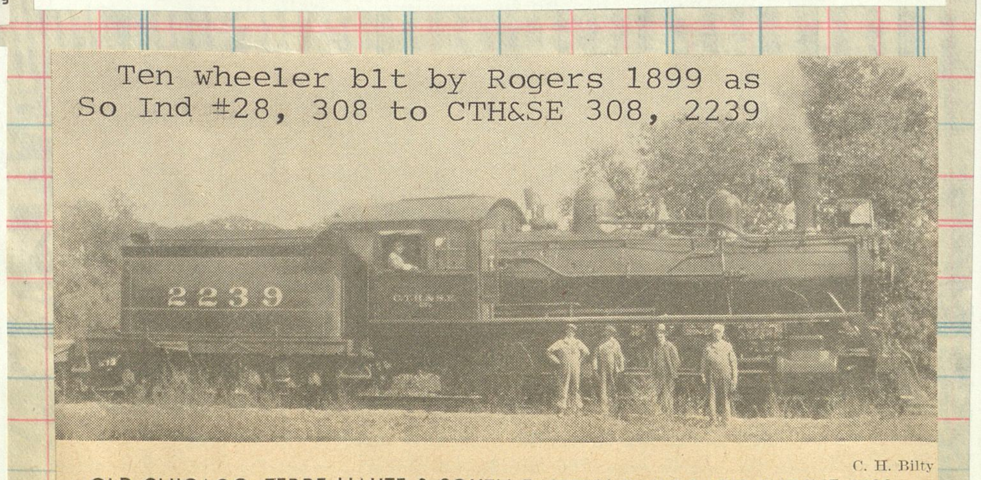

SOUTHEASTERN
113

To Milw #1400, 1550 Baldwin 1913 c/n 39758



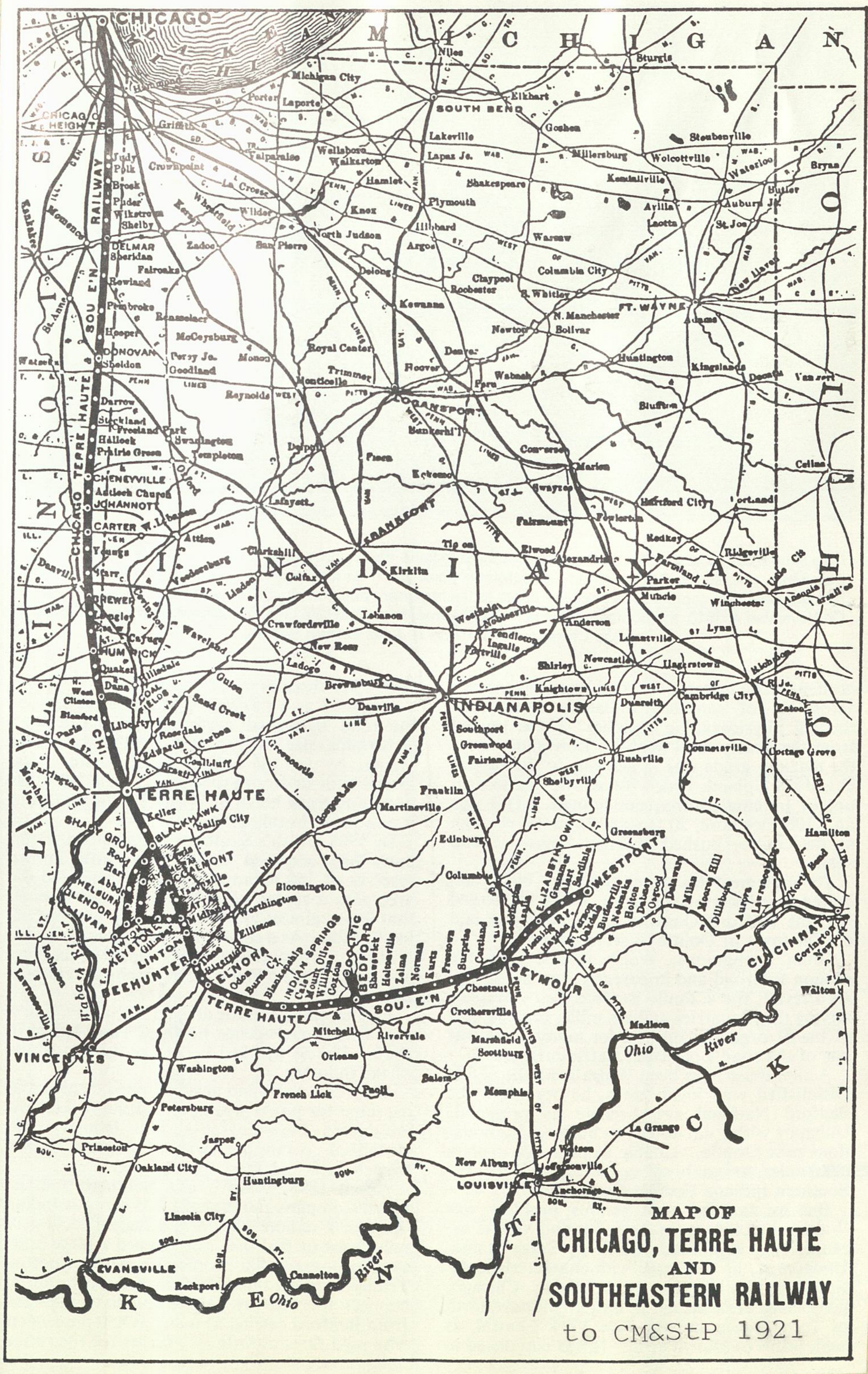
Blt by Rogers 1904 (c/n 6231) as So Ind 209
to CTH&SE 209, CM&STP 903, 41, 35, 98

Ten wheeler blt by Rogers 1899 as
So Ind #28, 308 to CTH&SE 308, 2239



C. H. Bilty

OLD CHICAGO, TERRE HAUTE & SOUTH EASTERN RAILROAD'S ENGINE 2239


CHICAGO
MICHIGAN
INDIANA
ILLINOIS
OHIO
KENTUCKY
INDIANAPOLIS
TERRE HAUTE
FT. WAYNE
LAFAYETTE
SEYMOUR
WESTPORT
CINCINNATI
LOUISVILLE
VINCENNES
EVANSVILLE
BEDFORD
Ohio River

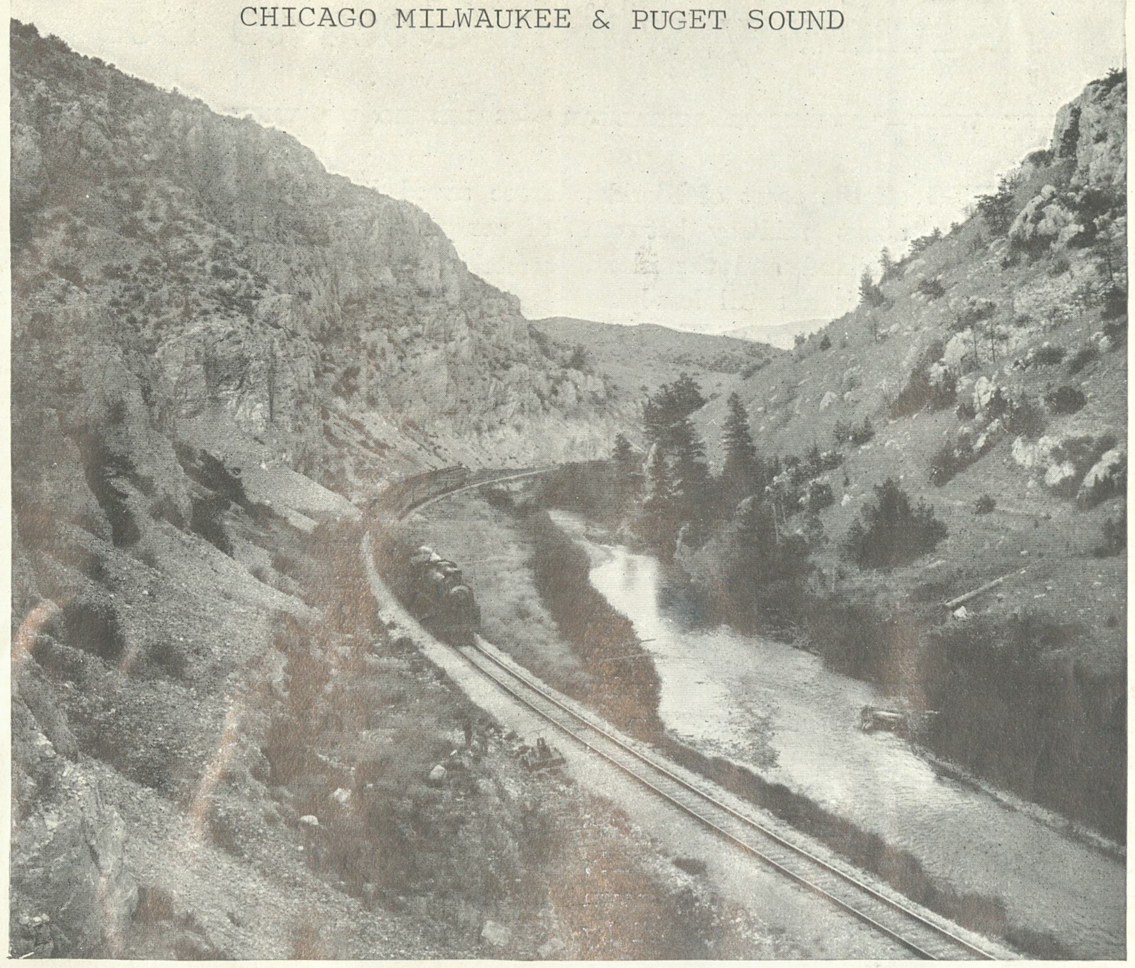
MAP OF
CHICAGO, TERRE HAUTE
AND
SOUTHEASTERN RAILWAY

to CM&StP 1921

HICAGO
MILWAUKEE
AND
PUGET SOUND

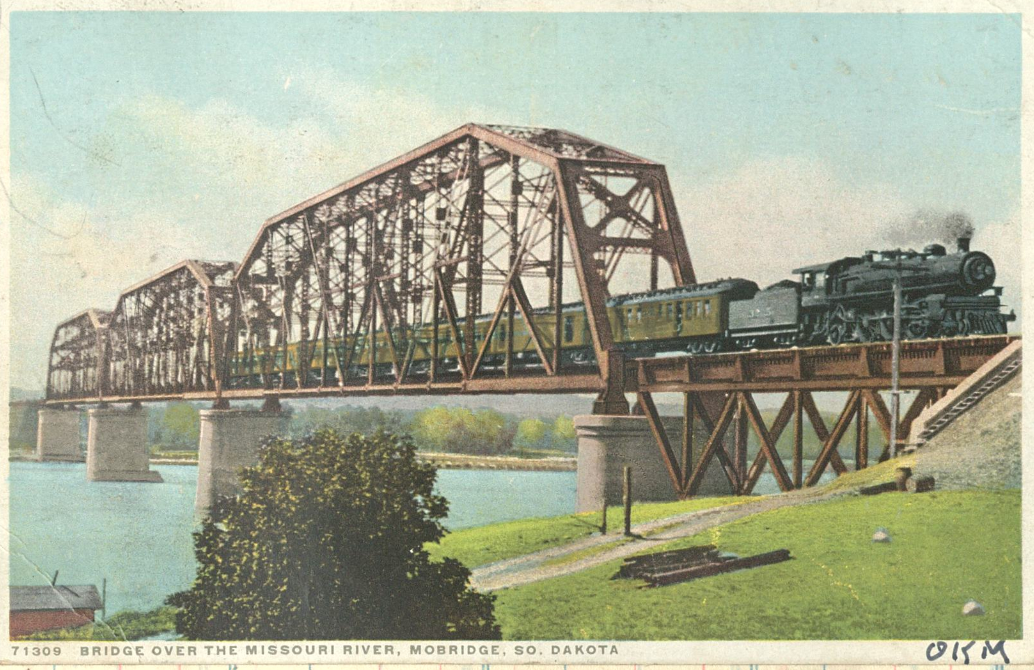
n November 1905 the "StPaul" decided to ush their rails thru o the Pacific North est. Construction as started in April 906 under the name f Chicago, Milwaukee nd Puget Sound at obridge, N.D. 1,400 iles of main line ailroad was built hat crossed five ountain ranges; the elts, Rockies, the itter Roots, Saddles, nd Cascades, in just hree years!!! Road pened May 1909. Oper-ion taken over by .M.& StP in 1912. 56 miles were elec-rified in 1915-1919.

CHICAGO MILWAUKEE & PUGET SOUND



THE "OLYMPIAN" PASSING THROUGH THE MONTANA CANYON.

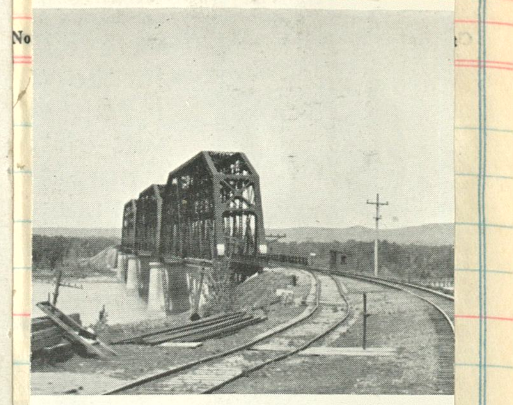
Z



71309 BRIDGE OVER THE MISSOURI RIVER, MOBRIDGE, SO. DAKOTA

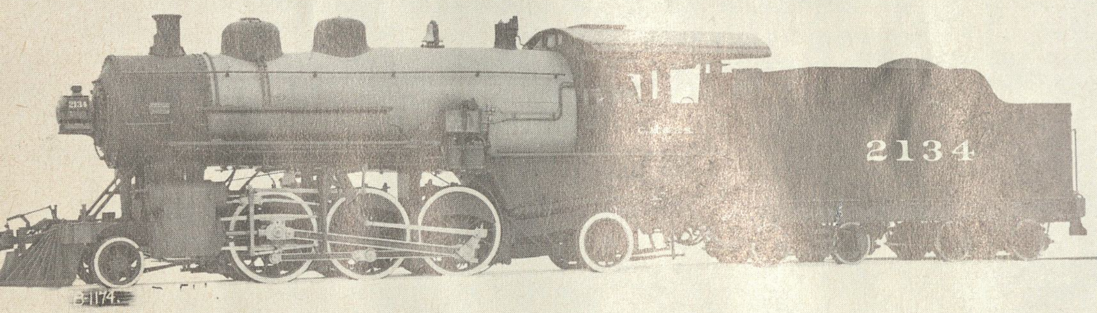
OKM

Service on the greater part of the old CM&PS was suspended 1980



The Missouri River Bridge at Mobridge

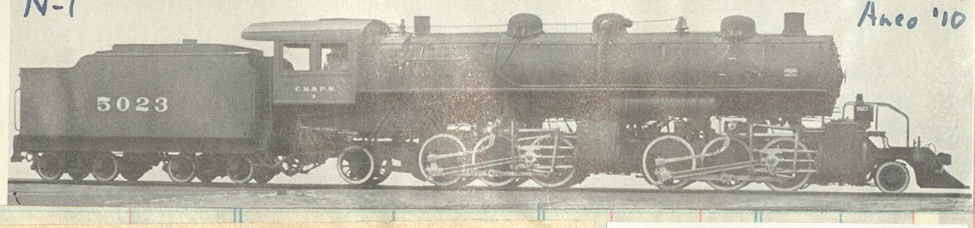
CM & P S



2120-2144 c/n 45829 Brooks 1909

| | |
|---|---|
| inders | 23½″ & 37″ x 30″ |
| vers, diam. | 57″ |
| am pressure | 200 lb. |
| te area | 72 sq. ft. |
| ting surface | 6555 sq. ft. |
| ight on drivers | 323,500 lb. |
| " total engine | 390,000 lb. |
| ctive force<br>compound) | 70,400 lb. |

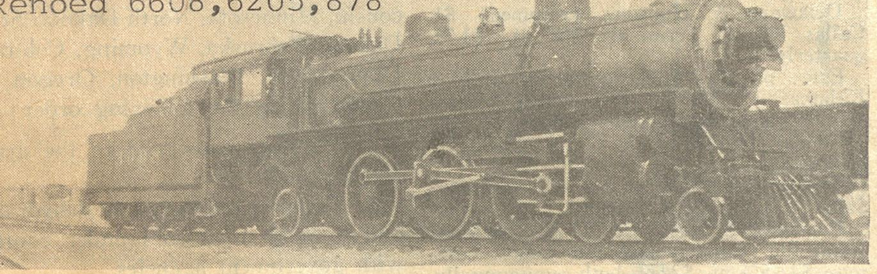
N-1



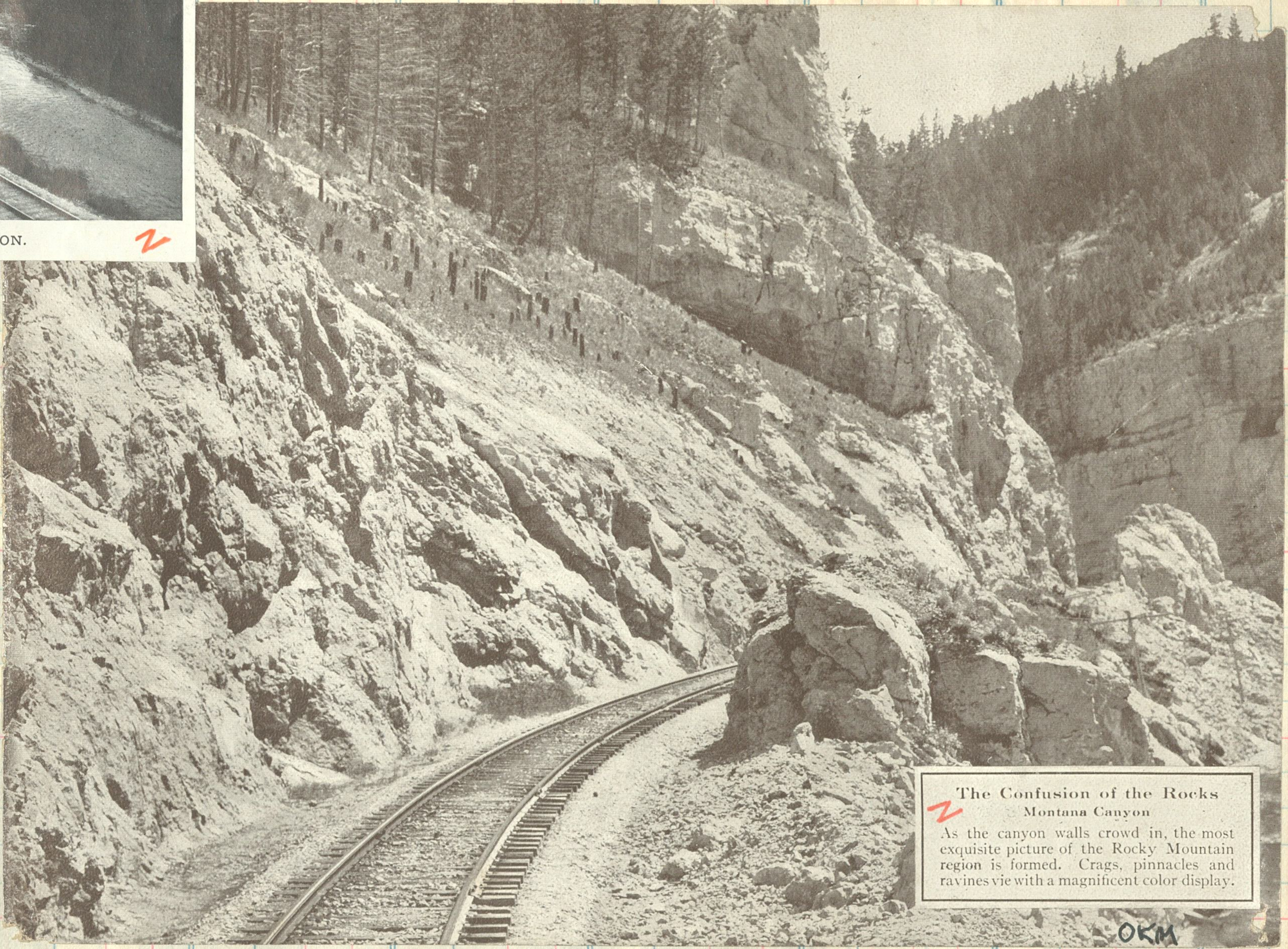
Alco '10

CM&PS 5000-5024
Schen 1910-11
Renoed 9500-9524

3000-3024 Milw Shops 1910
Renoed 6608,6205,878



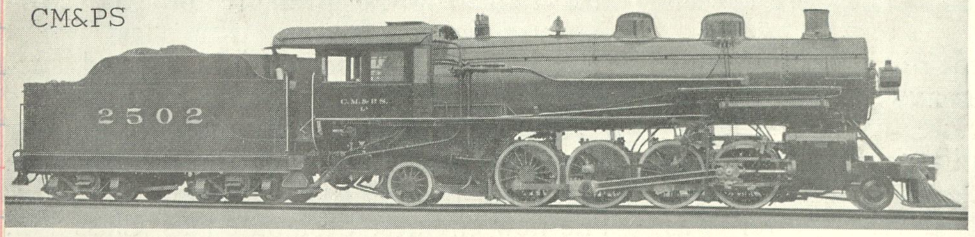
OLD CHICAGO, MILWAUKEE & PUGET SOUND ENGINE 3008



Z **The Confusion of the Rocks**
Montana Canyon
As the canyon walls crowd in, the most exquisite picture of the Rocky Mountain region is formed. Crags, pinnacles and ravines vie with a magnificent color display.

OKM

CM&PS

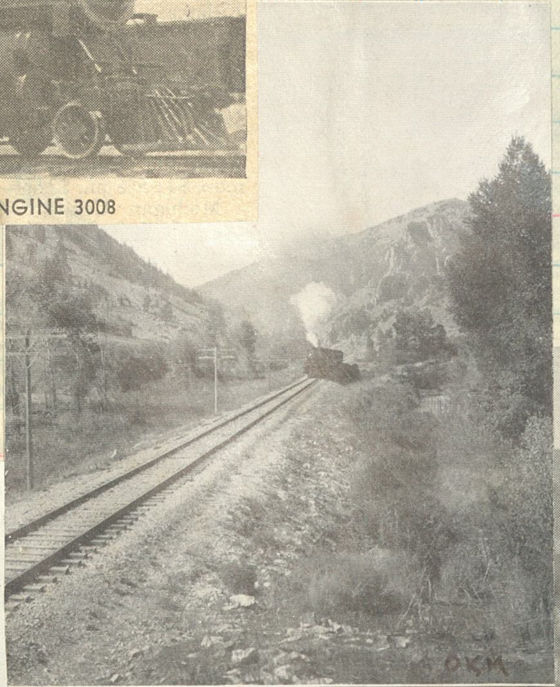


Mikado Type Locomotive, Class L1, Built at the Milwaukee Shops, 1909

2500-2519

| | |
|---|---|
| Cylinders | 24″ x 30″ |
| Drivers, diam. | 63″ |
| Steam pressure | 200 lb. |
| Grate area | 48.8 sq. ft. |
| Heating surface | 3614 sq. ft. |
| Weight on drivers | 201,000 lb. |
| " total engine | 260,500 lb. |
| Tractive force | 46,630 lb. |

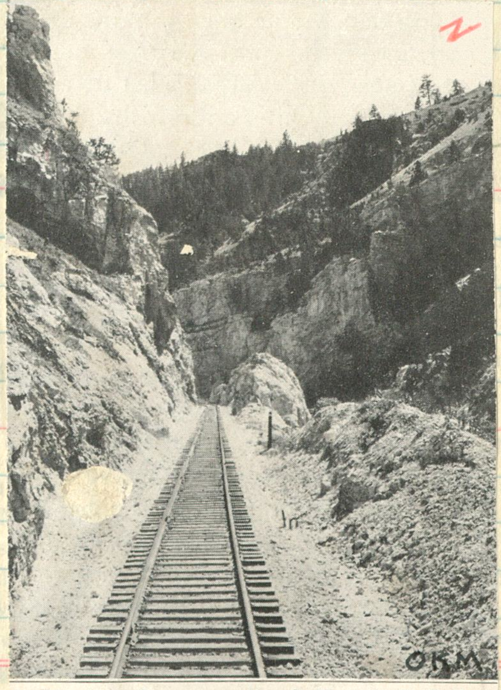
Z indicates trackage later under electric operation



OKM

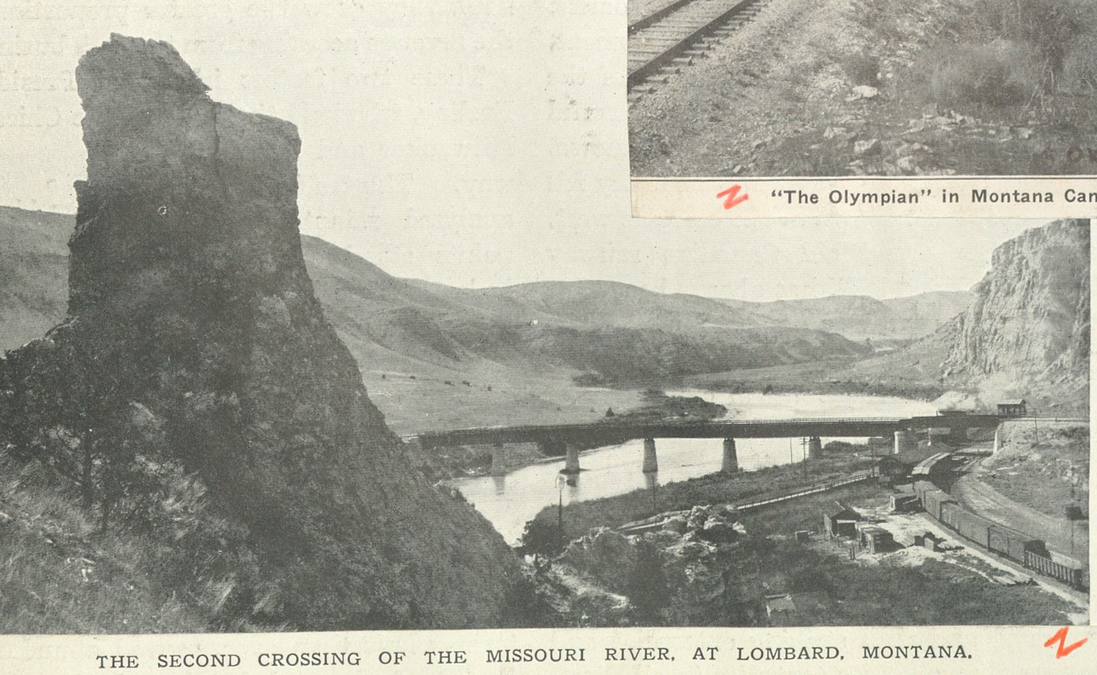
Z "The Olympian" in Montana Canyon

Z



OKM

In Montana Canyon on the C. M. & St. P. Railway

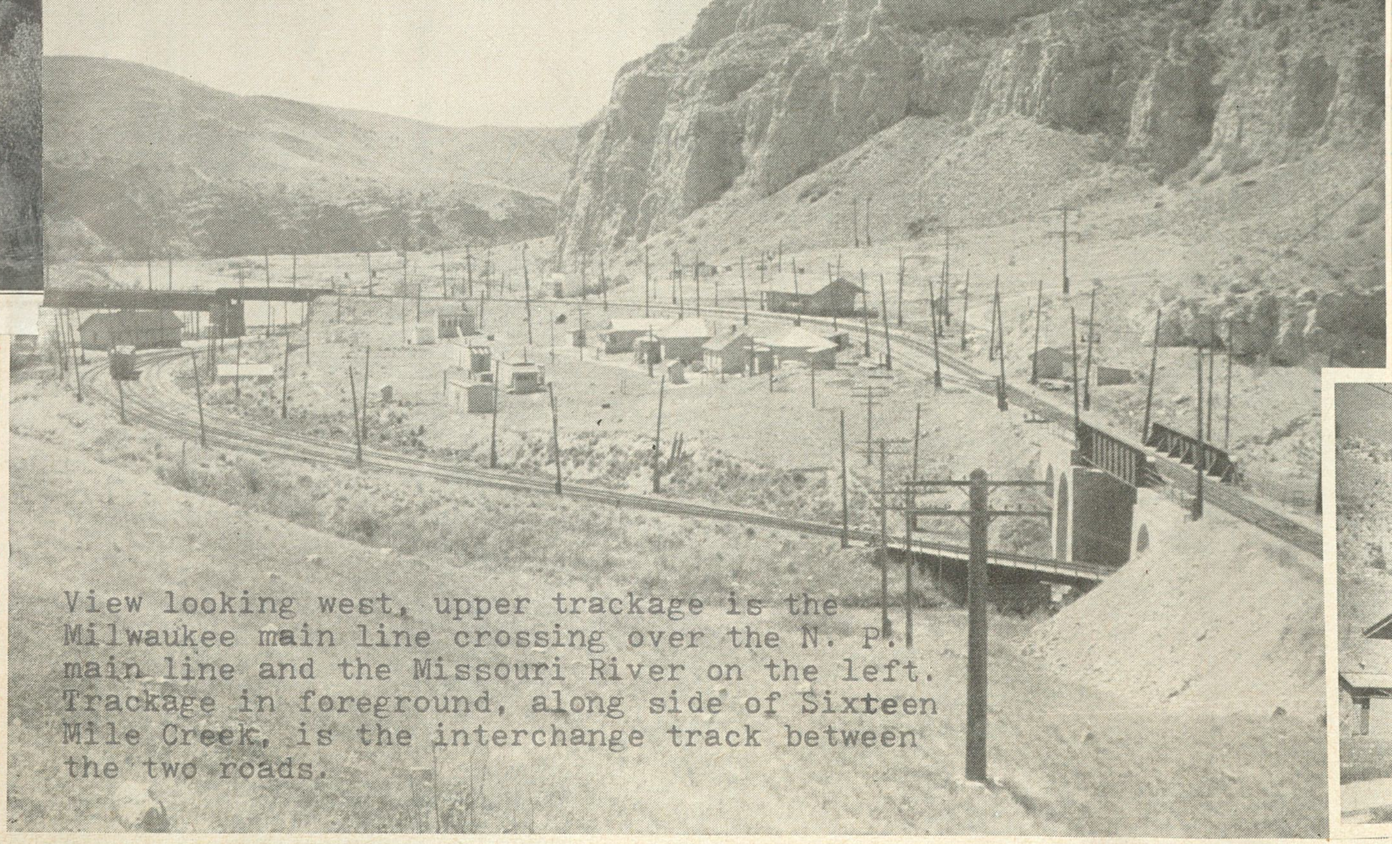


THE SECOND CROSSING OF THE MISSOURI RIVER, AT LOMBARD, MONTANA.

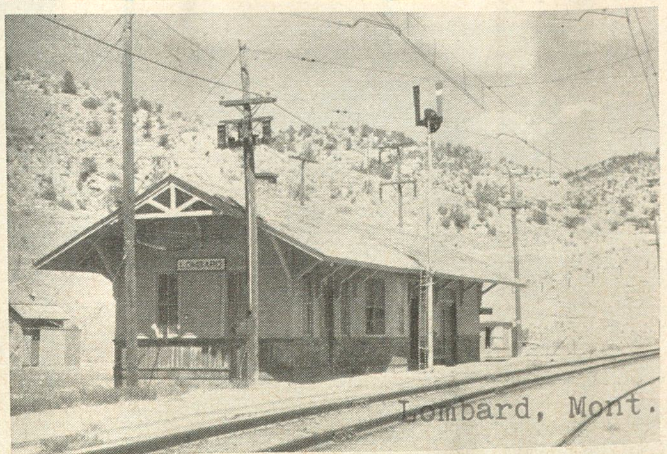
Z

the waterway the distance from the first crossing of the Missouri at Mobridge to Lombard is 1,000 miles: by the Chicago, Milwaukee and Puget Sound Railway it is 623 miles.

Lombard, Montana

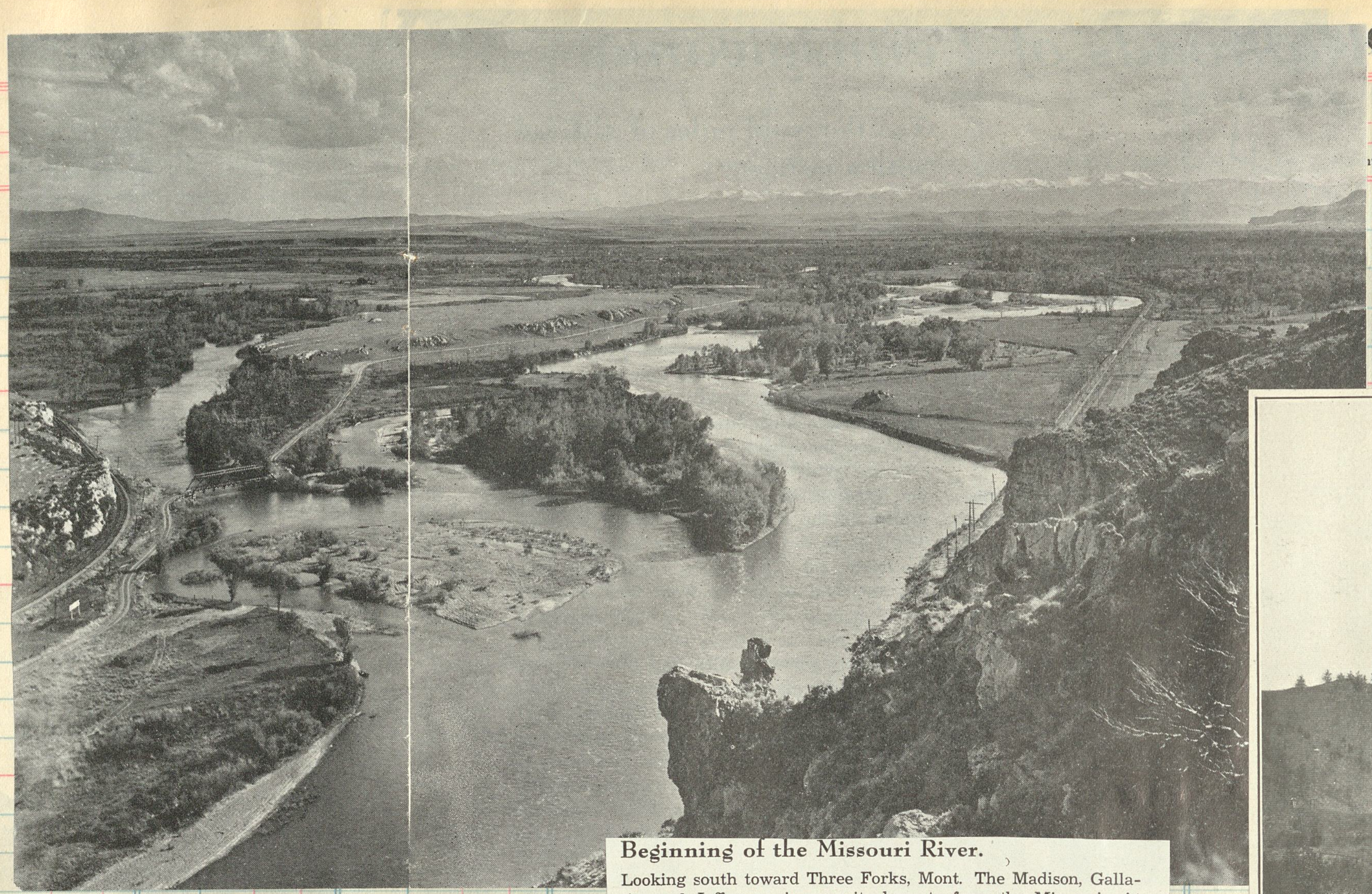


View looking west, upper trackage is the Milwaukee main line crossing over the N. P. main line and the Missouri River on the left. Trackage in foreground, along side of Sixteen Mile Creek, is the interchange track between the two roads.



Lombard, Mont.

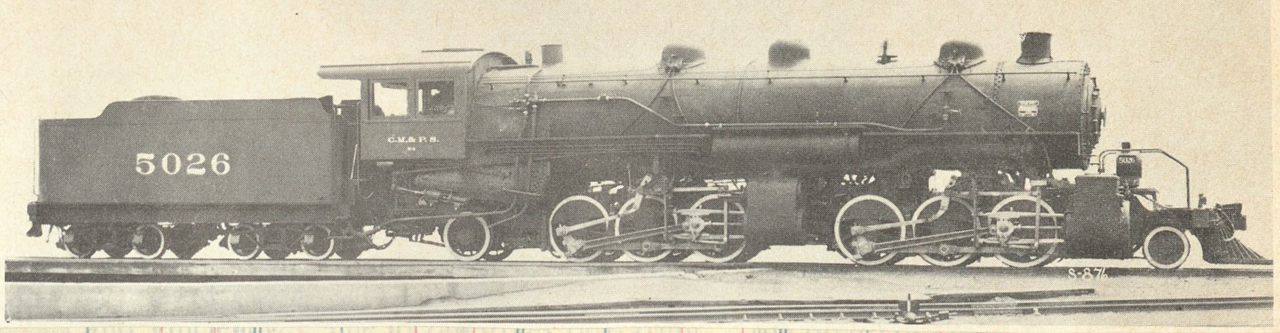
Clos. No.

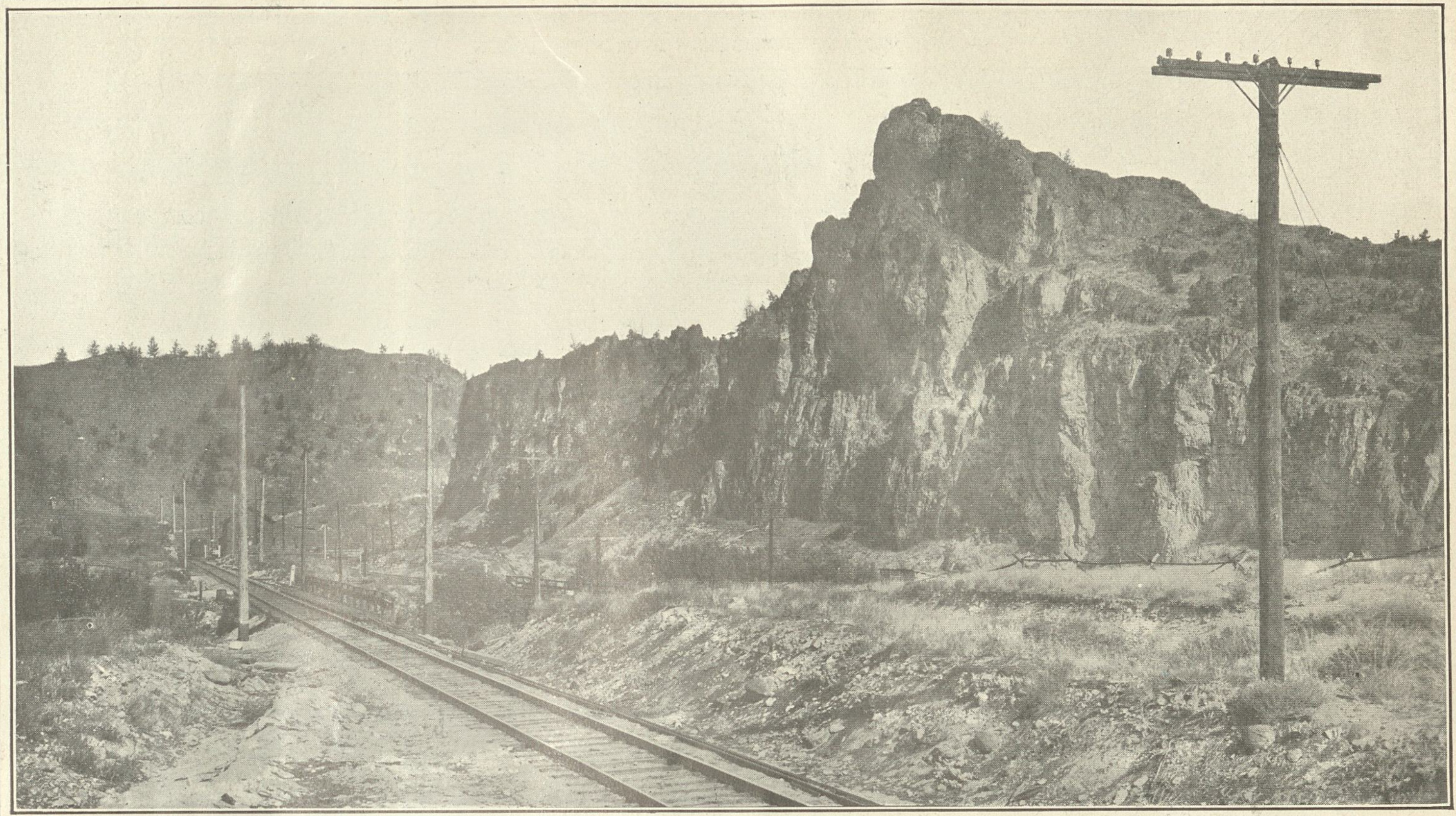


**Beginning of the Missouri River.**

Looking south toward Three Forks, Mont. The Madison, Gallatin, and Jefferson rivers unite here to form the Missouri. At left is Northern Pacific's right of way; at right is the Milwaukee Road's. Rival trains bound for the same destination pass each other in opposite directions at this point.

5025-5029 CM&PS c/n 51063 Schenectady 1912
renoed CM&StP #9601, CMStP&P #90

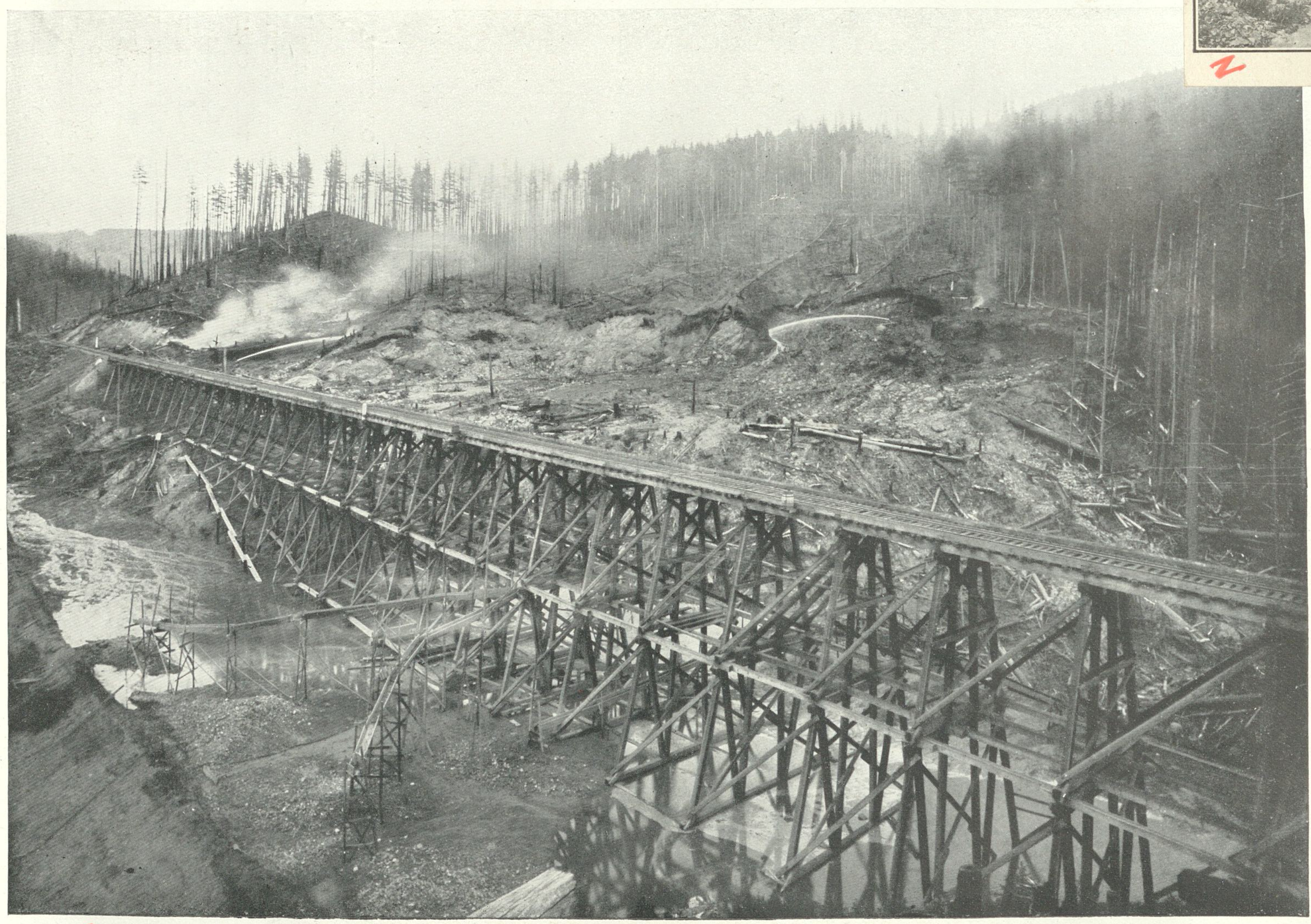




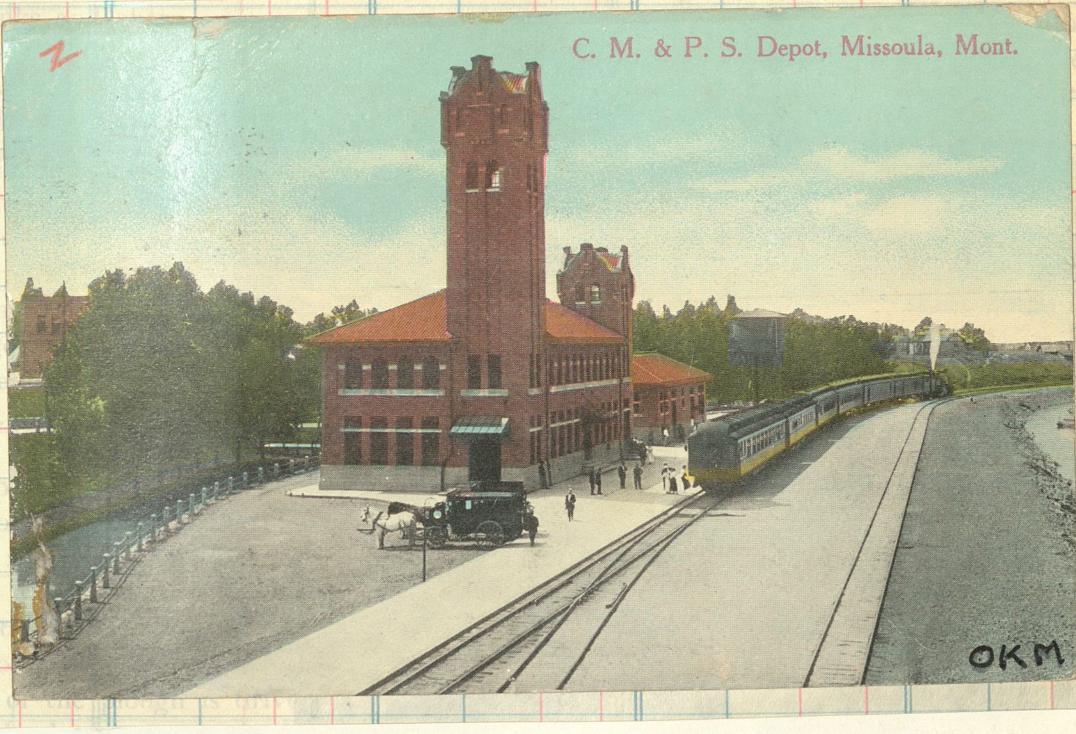
SILVER BOW CANYON, MONT.

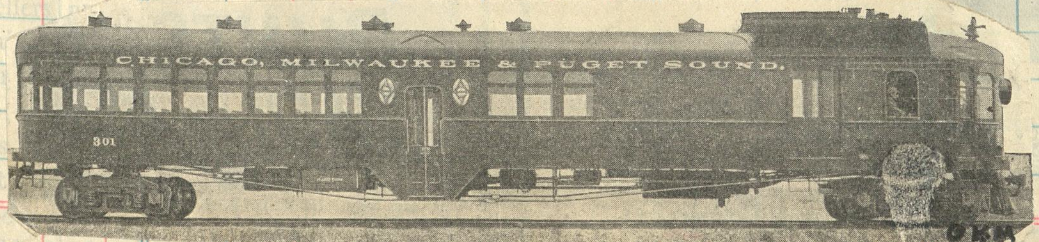
Z

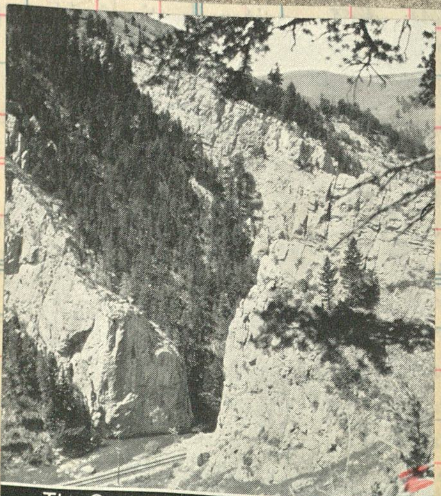
West of Butte. "StPaul" track in foreground (note poles for the overhead electric wire in place) with the Northern Pacific main line at right .



Z FILLING UP A TRESTLE: THE MONITORS AT WORK WASHING DOWN THE HILLSIDE. CM&PS

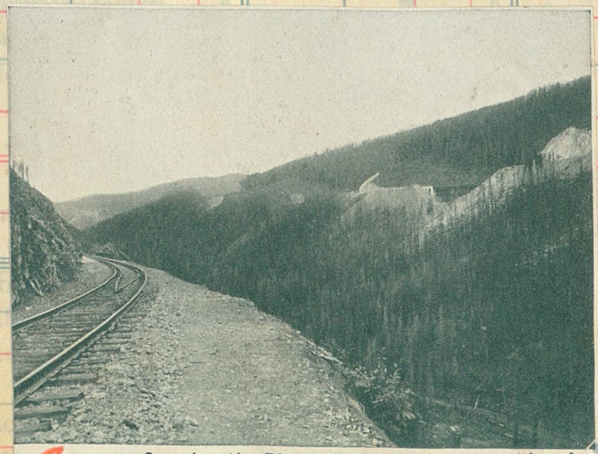






The Gateway, Montana Canyon.

Z



Z Crossing the Bitter Roots in Idaho OKM

Z On the C. M. & St. P. Through Bitter Root Mountains OKM

HOW THE CHICAGO, MILWAUKEE AND PUGET SOUND RAILWAY MAKES ITS TORTUOUS WAY THROUGH THE BITTER ROOT MOUNTAINS OF MONTANA

Z

2

SELLER
DATE
FORM
DESTIN

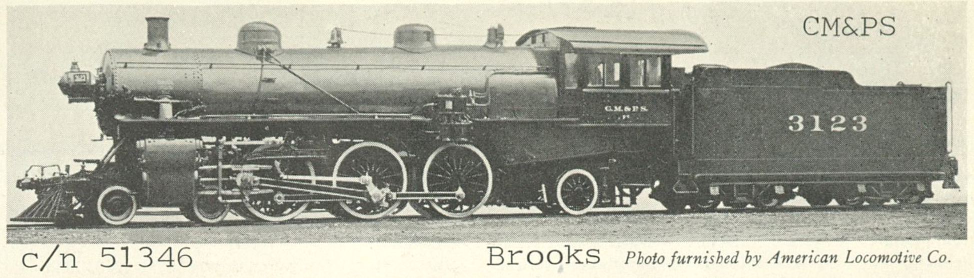
l Sy

Amount

los. No. | Sold | Amount | Clos. No. | Sold | Amount

In the Heart of the Bitter Root Mountains

| | |
|---|---|
| Cylinders | 25" x 28" |
| Drivers, diam. | 69" |
| Steam pressure | 200 lb. |
| Grate area | 48.8 sq. ft. |
| Water heating surface | 2977 sq. ft. |
| Superheating surface | 620 sq. ft. |
| Weight on drivers | 160,000 lb. |
| " total engine | 253,000 lb. |
| Tractive force | 43,120 lb. |

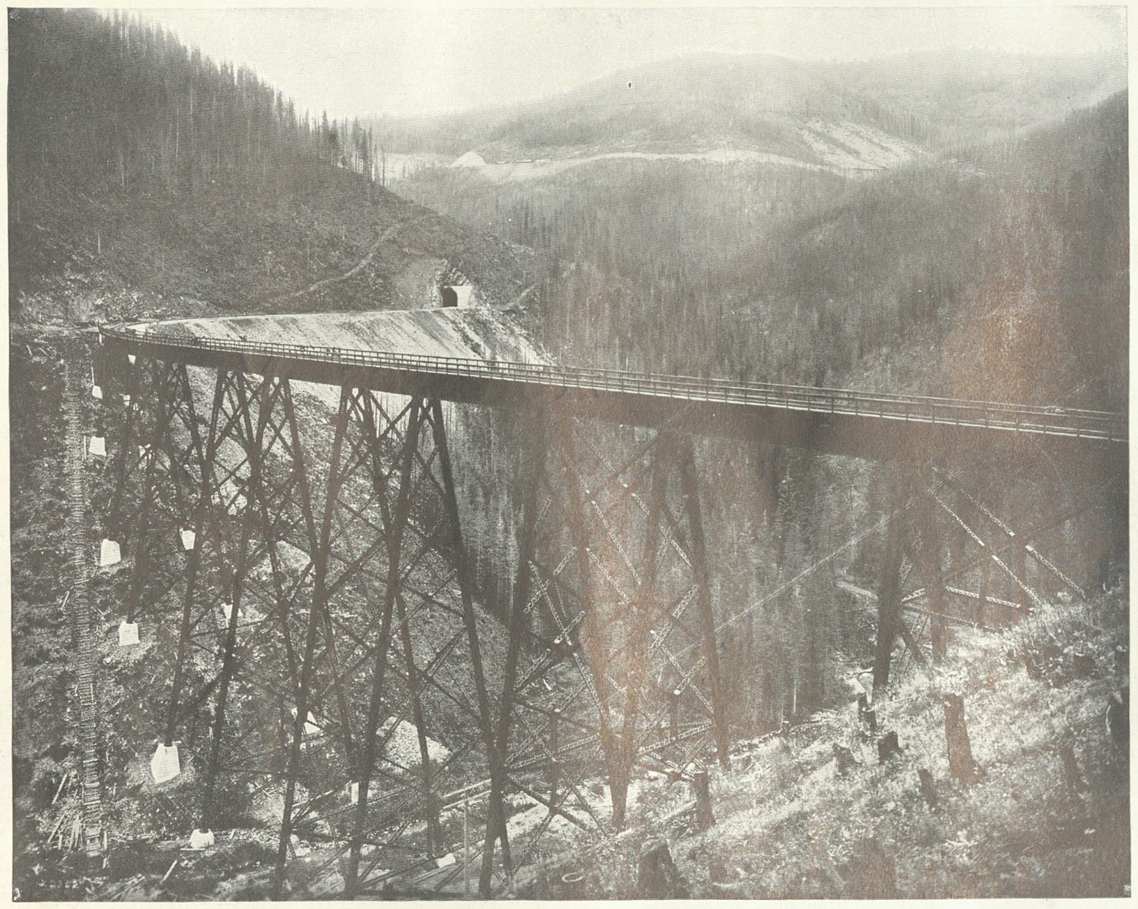


3115-3124

c/n 51346

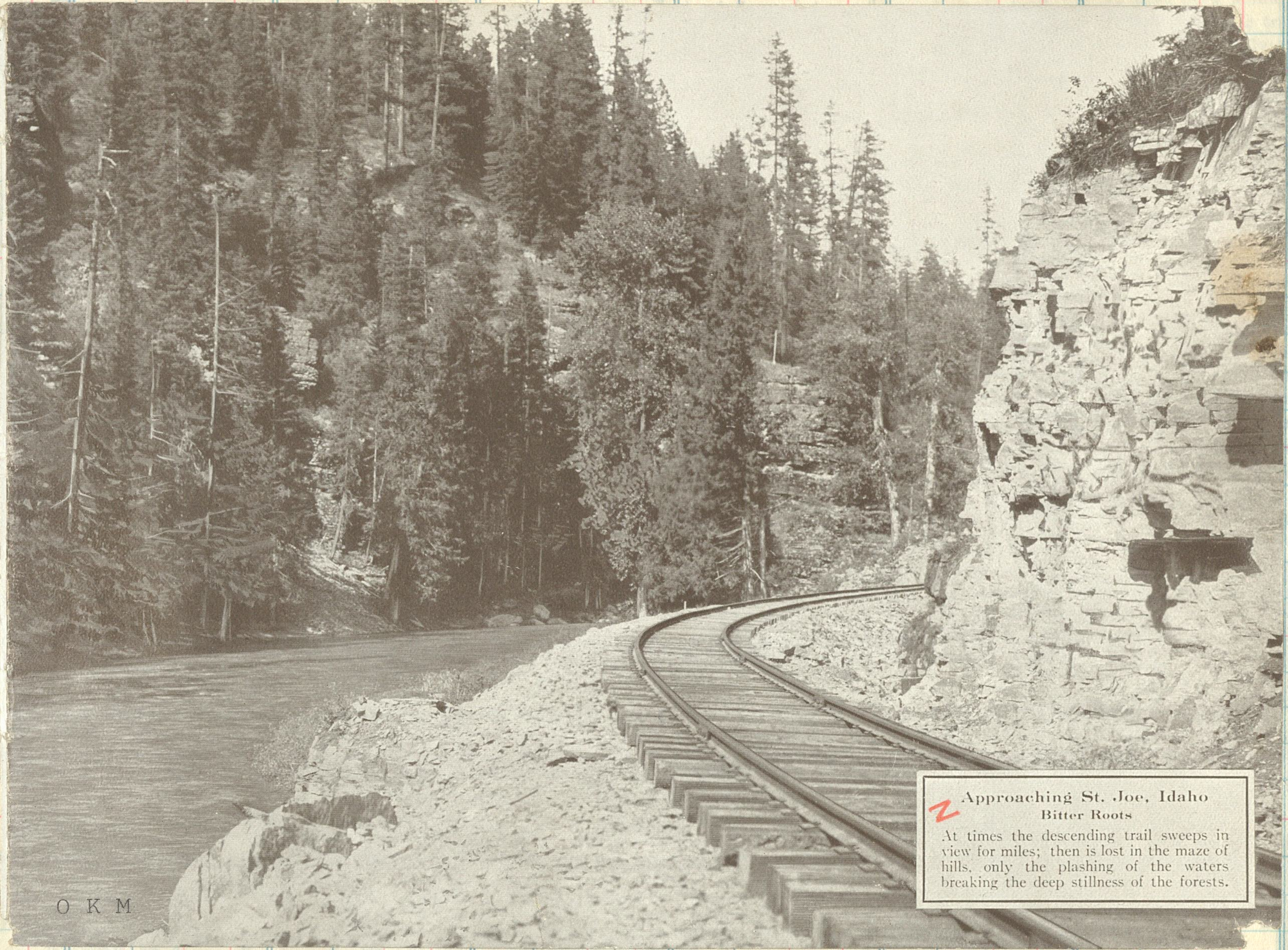
Brooks *Photo furnished by American Locomotive Co.*

Pacific Type Locomotive, Class F5-b, Built by the American Locomotive Company, 1912



WONDERFUL PLOTTING AMONG THE BITTER ROOT MOUNTAINS, MONTANA, TO PRESERVE THE EASY GRADE OF THE CHICAGO, MILWAUKEE AND PUGET SOUND RAILWAY.

The line twists and worms by trestle, tunnel, cutting and fill along the mountain flanks in a bewildering manner, to reappear upon the distant slopes.

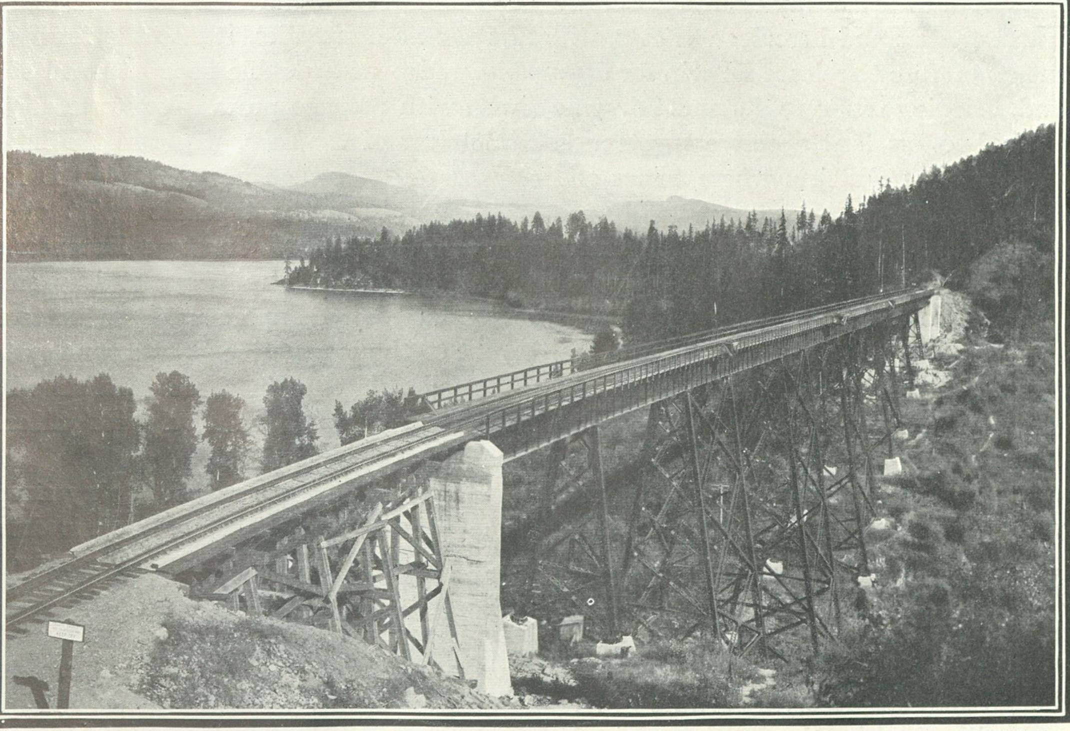


Approaching St. Joe, Idaho
Bitter Roots

At times the descending trail sweeps in view for miles; then is lost in the maze of hills, only the plashing of the waters breaking the deep stillness of the forests.

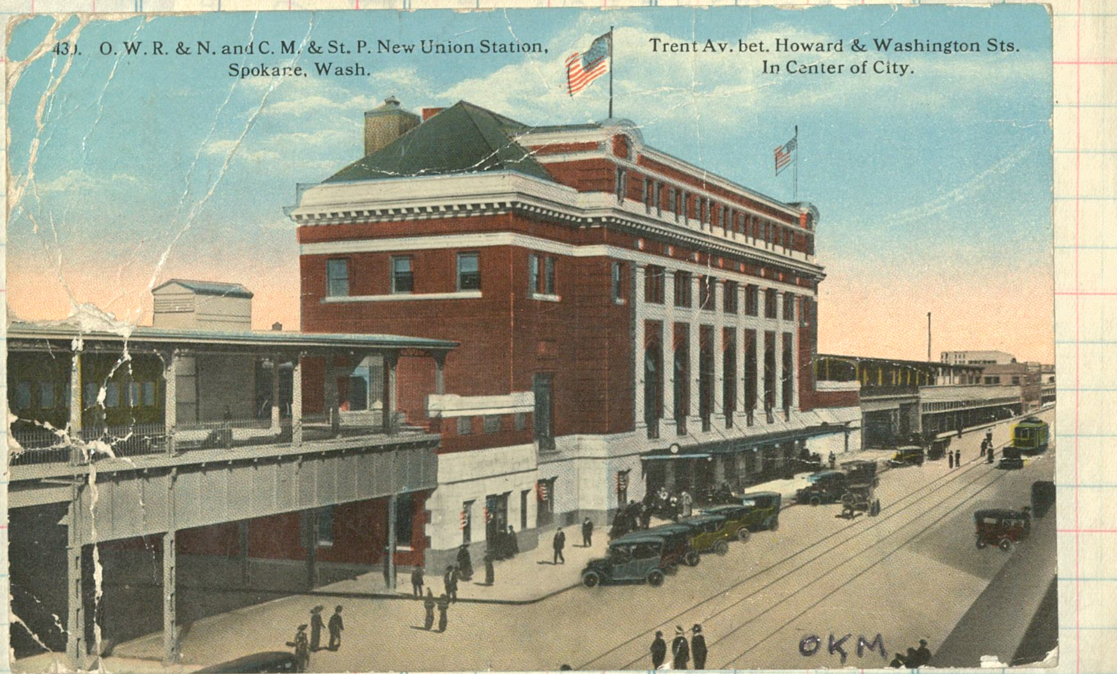
OKM

A Winding Descent of the Bitter Root Mountains.



*Photograph supplied by the Chicago, Milwaukee and Puget Sound Railway*

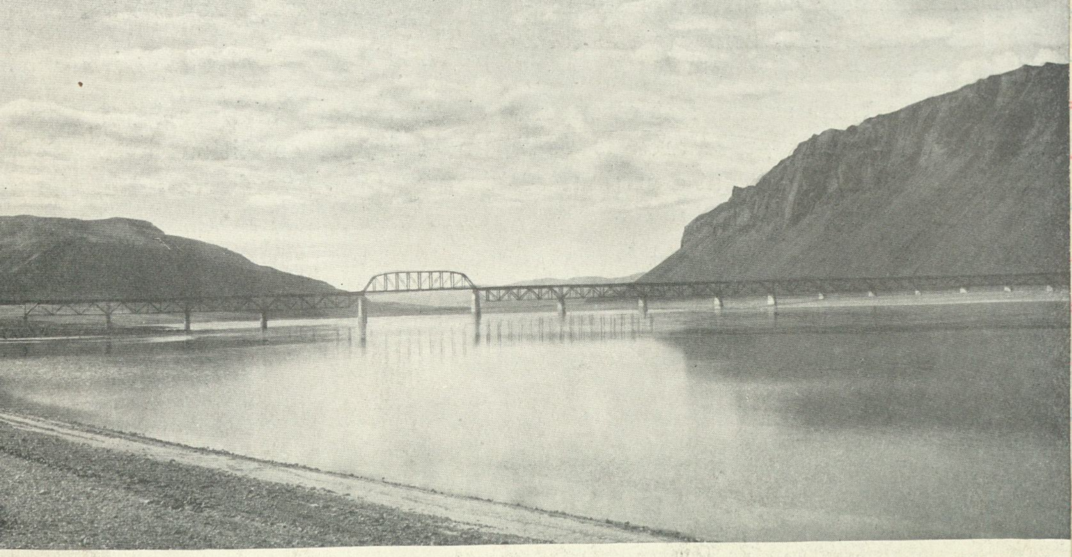
LAKE CHATCOLETTE, EASTERN WASHINGTON.



431. O. W. R. & N. and C. M. & St. P. New Union Station, Spokane, Wash.

Trent Av. bet. Howard & Washington Sts. In Center of City.

OKM

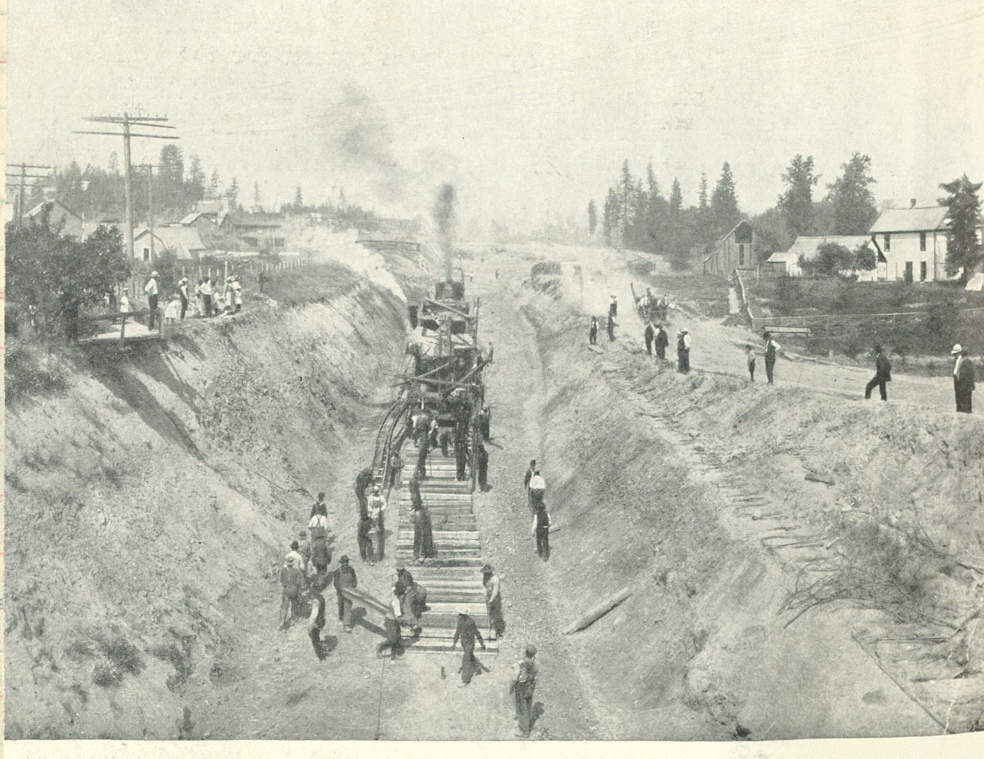


MASSIVE STEEL BRIDGE WHICH CARRIES THE CHICAGO, MILWAUKEE AND PUGET SOUND RAILWAY ACROSS THE COLUMBIA RIVER, NEAR BEVERLY, WASHINGTON.

It is 2,740¼ feet in length.

OKM

COLUMBIA RIVER BRIDGE AT BEVERLY, WASH.



LAYING THE METALS AT THE RATE OF FIVE MILES A DAY.

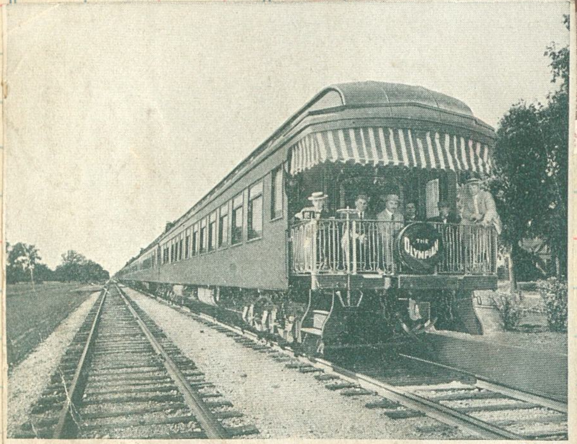
The track-layer at work on the Chicago, Milwaukee and Puget Sound Railway.

N The Snow-Crowned Cascades, Washington OKM

*Photograph supplied by the Chicago, Milwaukee and Puget Sound Railway.*

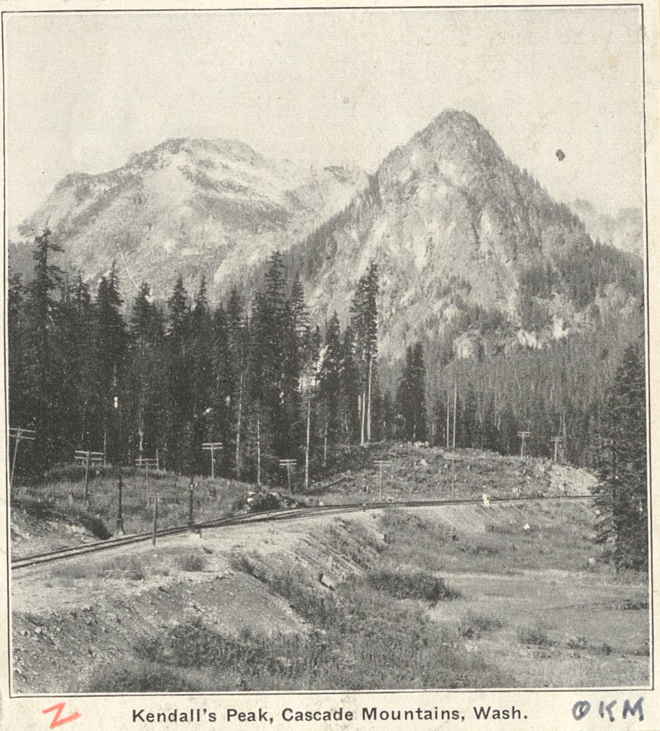
N LAKE KEECHELUS, IN THE CASCADE MOUNTAINS.

Showing snow-shed to protect the Chicago, Milwaukee and Puget Sound Railway, which skirts its shore.



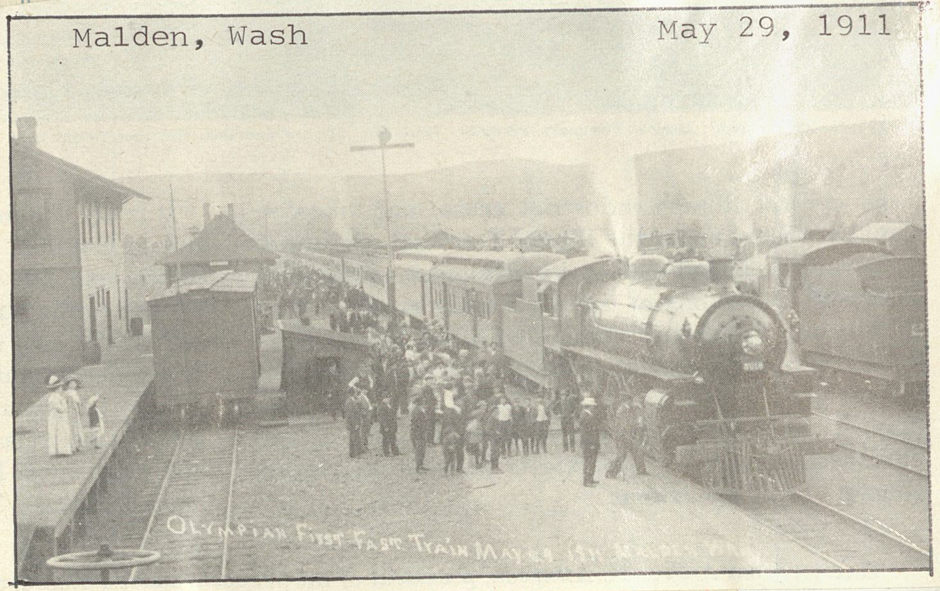
The "Olympian" En Route OKM

N

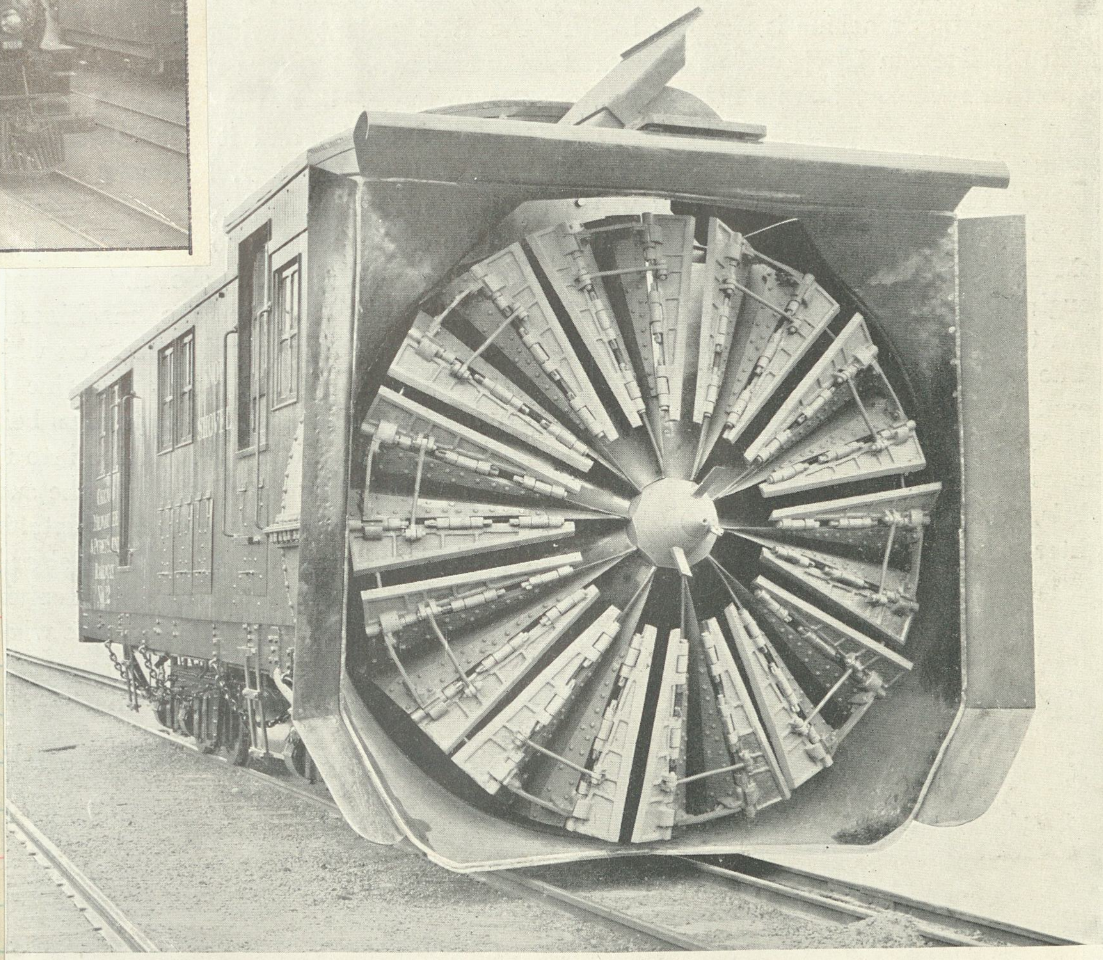


N Kendall's Peak, Cascade Mountains, Wash. OKM

Malden, Wash May 29, 1911



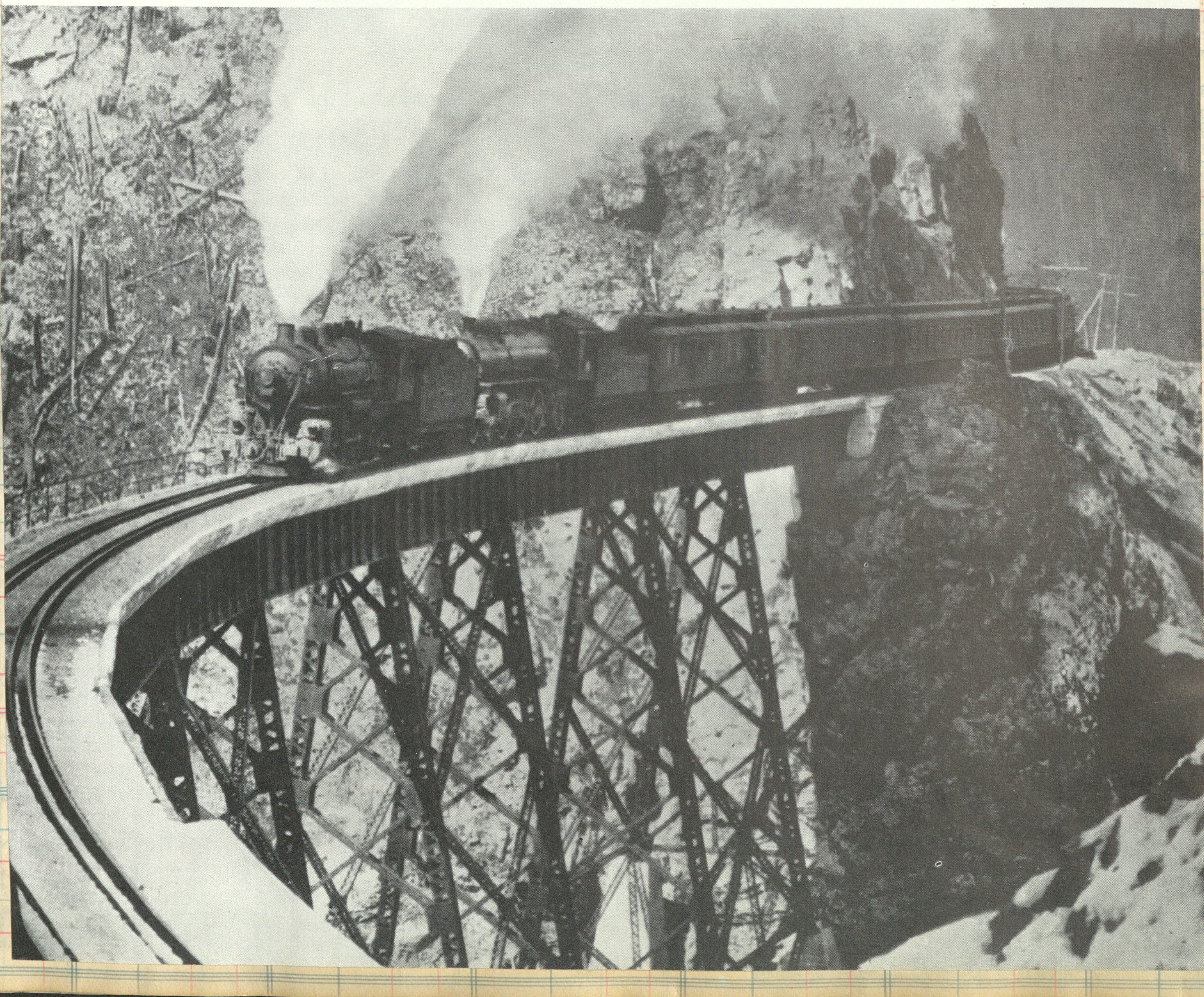
OLYMPIAN FIRST FAST TRAIN MAYER



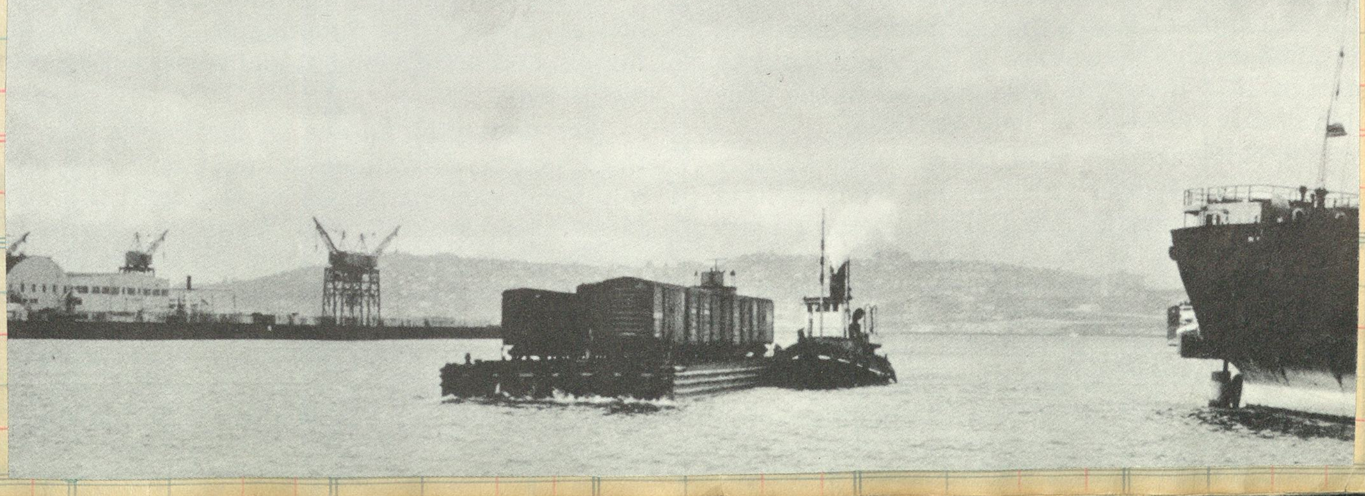
FRONT VIEW OF THE CHICAGO, MILWAUKEE AND PUGET SOUND RAILWAY'S HUGE ROTARY SNOW-PLOUGH.

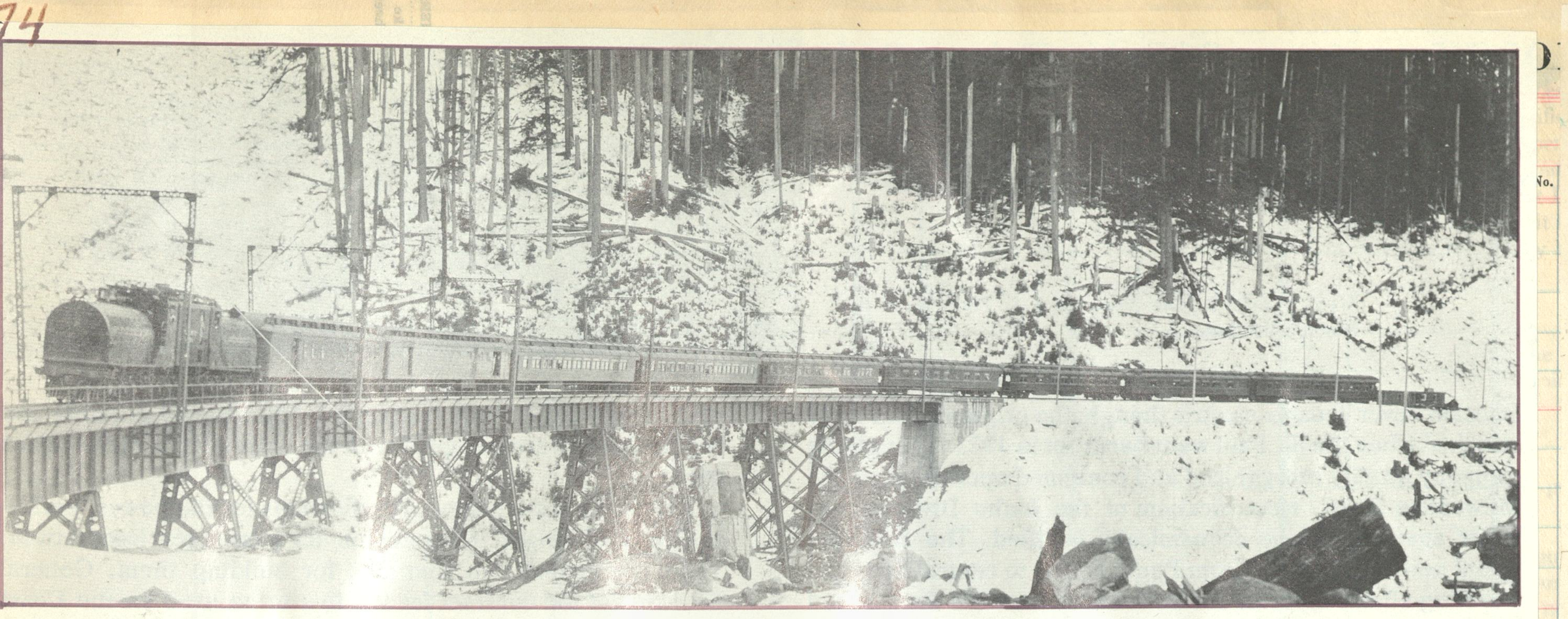
Built by the American Locomotive Company. The wheel is 11 feet in diameter.

N **NORTHWEST PASSAGE.** Engines 2509 and 3018 doublehead the "OLYMPIAN" of the Milwaukee Road in this 1912 photo taken at Hull Creek bridge near Garcia, Washington, before electrification through the Cascades. (Courtesy of the Milwaukee Road)



The Milwaukee "navy"--Puget Sound





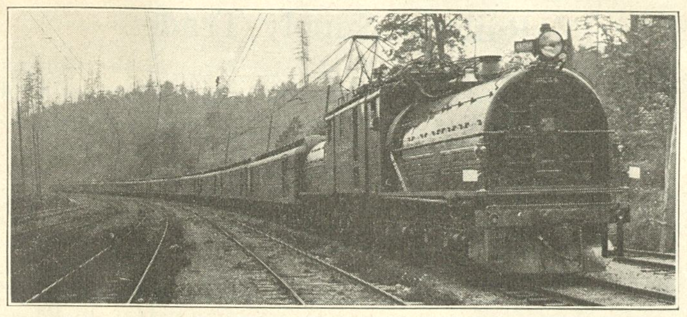
The OLYMPIAN glides along thru the Cascades. Made her initial trip in May 1911

### Valuable Silk Shipment Moves From Japan to New York in Fifteen Days.

1925

1925

The Chicago Milwaukee & St. Paul Ry. recently moved what is said to be the largest single shipment of silk on record, valued at ten million dollars, from Seattle to Chicago. The shipment, enroute Yokohama to New York, of ten thousand bales of silk which left Yokohama December 27, on the Osaka Shosen Kaisha steamer "Arabia Maru" arrived at the Seattle docks. It was then moved speedily eastward in two solid trains of 25 baggage cars over the C. M. & St. P. The total time of the silk in …nsit from Japan to New York was about 15 days. On account of its great value and the interest on the ten million dollars amounting to nearly $1,650 per day, it was necessary to handle the shipment at the fastest passenger train speed. The silk is in raw form, as taken from the worm cocoon and wound in skeins by nimble Japanese fingers. On reaching its various destinations it will be spun into thread, woven, and manufactured into cloth.



**Silk Train on C. M. & St. P.**

. No. Sold Amount Clos. No. Sold Amount

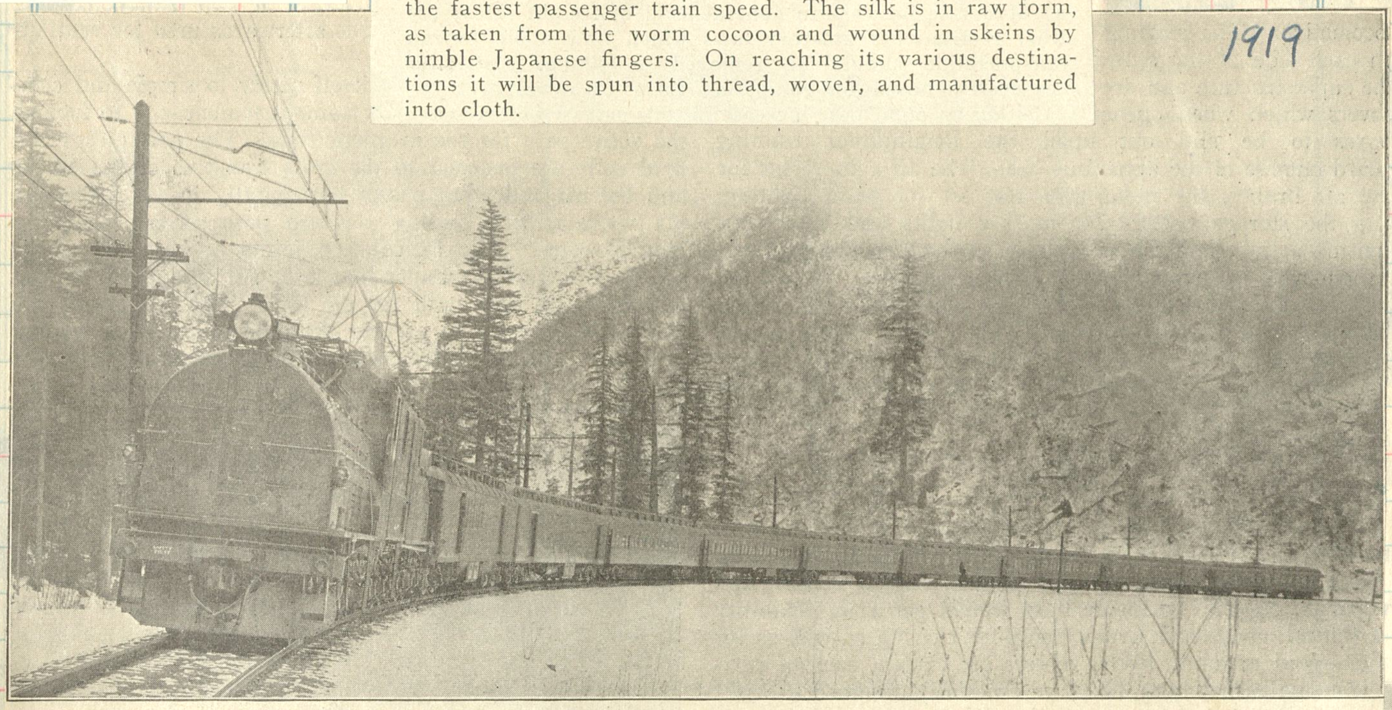
C. M. & St. P.
10251

Delegates to the National Foreign Trade Convention at San Francisco in May Pose Before One of the New St. Paul Locomotives

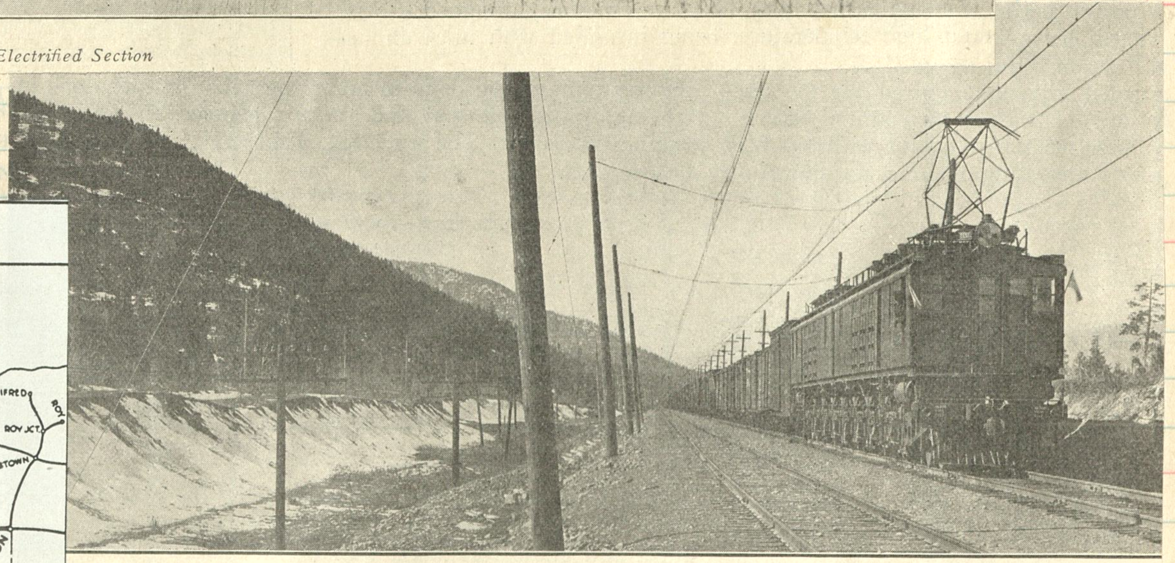
1920

These delegates had three special trains, one of which went over the St. Paul. Through the courtesy of that road each delegate was permitted to ride for a while in the locomotive. Another feature of the trip was the securing by telegraph for their benefit the closing stock market prices of some leading 40 stocks at New York. At one station the list was put on the train in the same manner as train orders—by means of the hoop.

1919



*St. Paul Passenger Train on the Western Electrified Section*

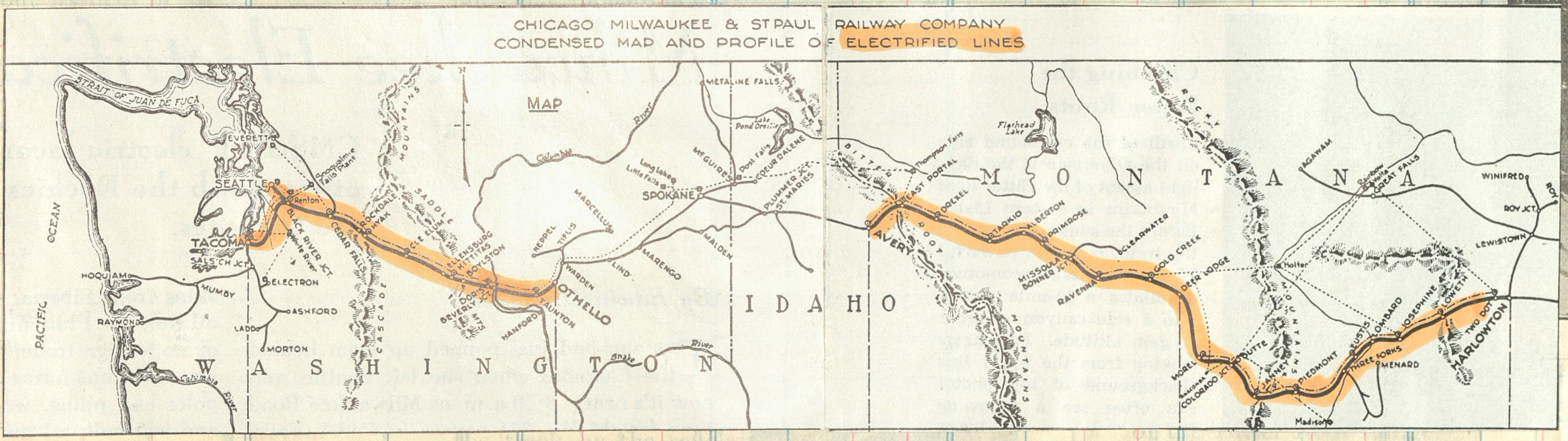


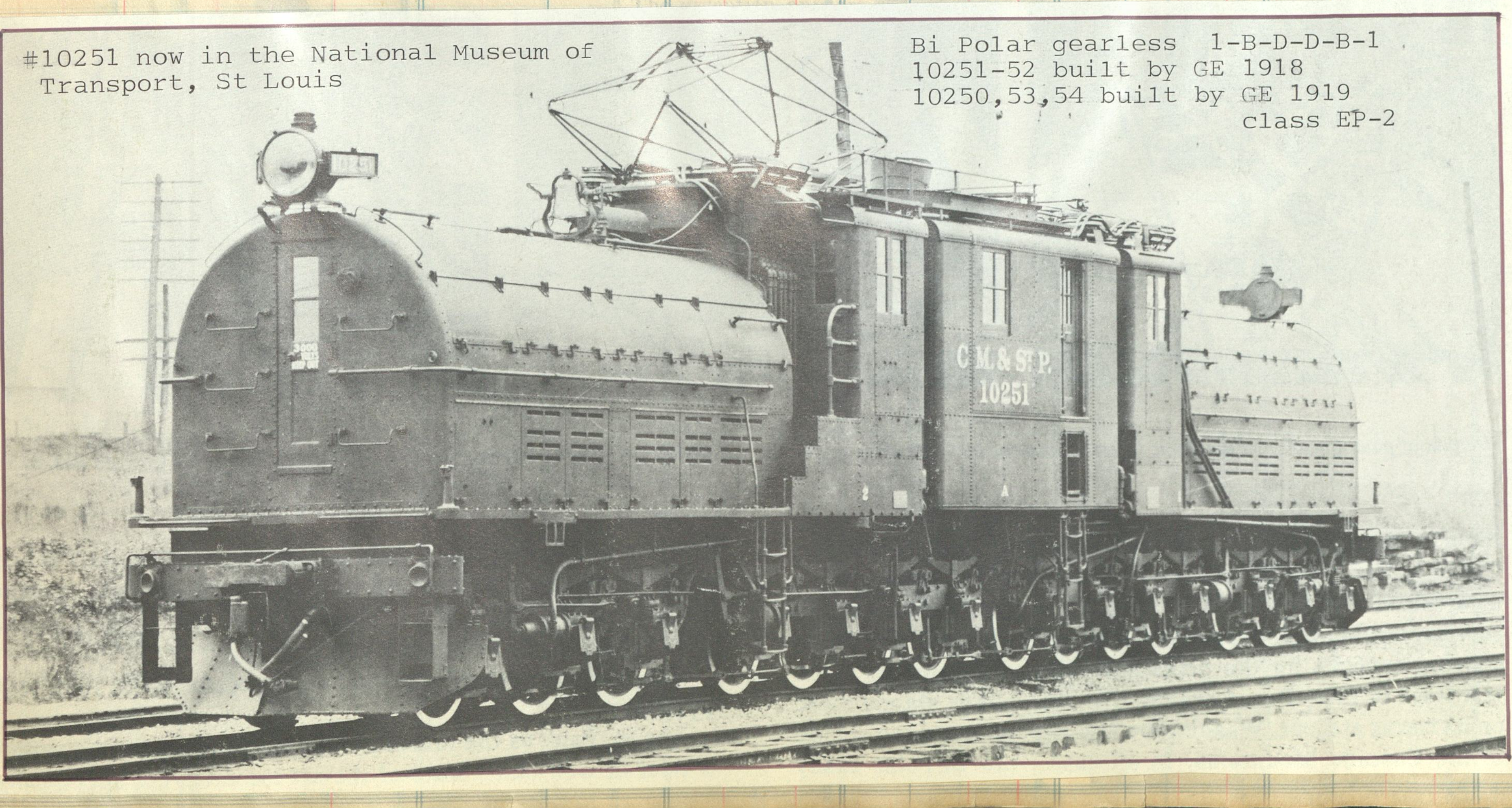
*A 100-Car, 5,000-Ton Freight Train, East-Bound at Thelma on the St. Paul.*

he line.

vo stretches of tough ckage are electrified th the comparatively vel Idaho division am operated between. e magnitude of this ctrification is only alized when one looks the mileage figures. e map covers a terriy equal to that from icago to New York!

CHICAGO MILWAUKEE & ST PAUL RAILWAY COMPANY
CONDENSED MAP AND PROFILE OF ELECTRIFIED LINES

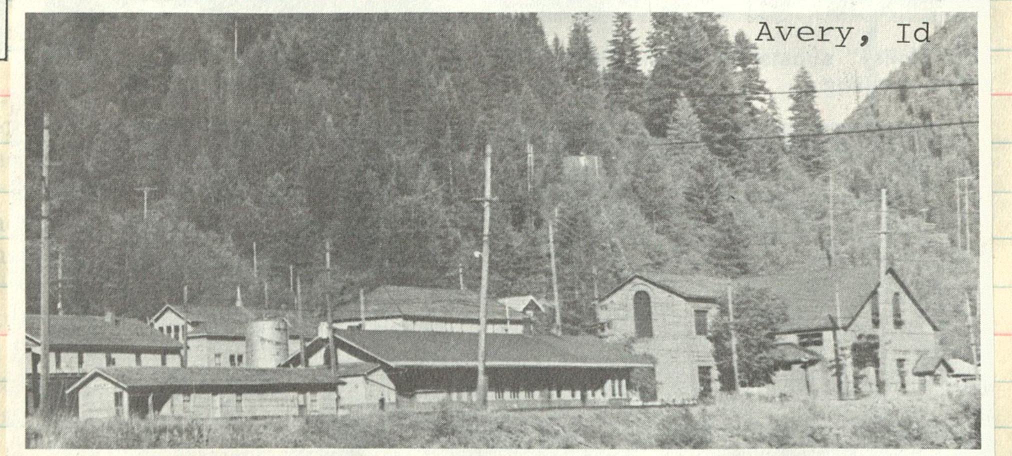

MAP
STRAIT OF JUAN DE FUCA
PACIFIC
OCEAN
SEATTLE
TACOMA
ELECTRON
ASHFORD
MORTON
RAYMOND
SPOKANE
METALINE FALLS
OTHELLO
IDAHO
WASHINGTON
MONTANA
AVERY
EAST PORTAL
DEER LODGE
BUTTE
THREE FORKS
HARLOWTON
LEWISTOWN
GREAT FALLS
WINIFRED
ROY JCT.



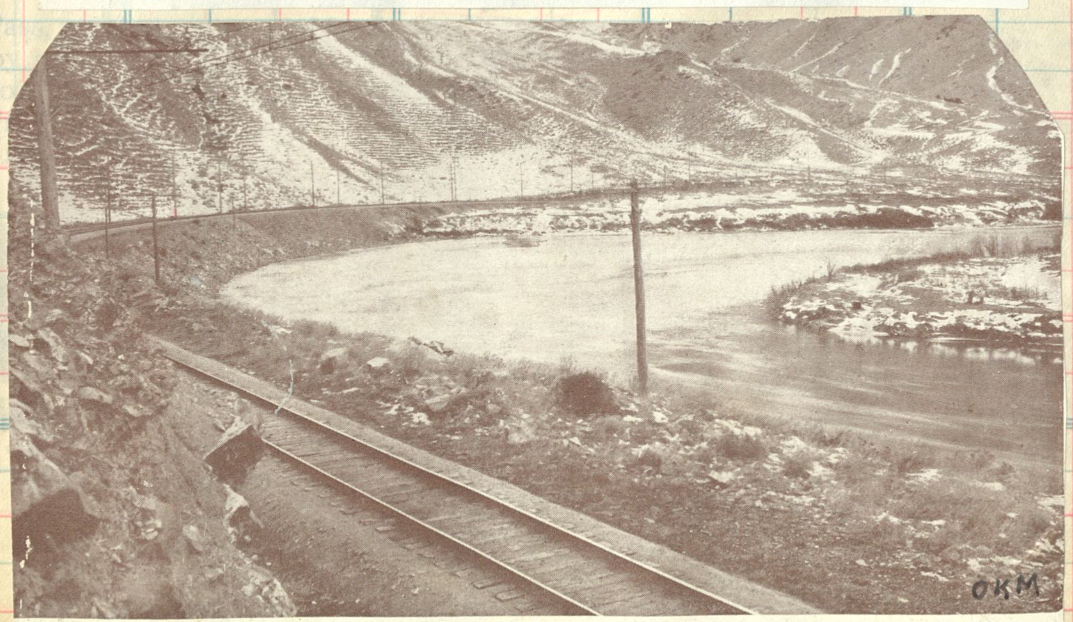
#10251 now in the National Museum of Transport, St Louis

Bi Polar gearless 1-B-D-D-B-1
10251-52 built by GE 1918
10250,53,54 built by GE 1919
class EP-2

C.M.& St.P.
10251



Avery, Id

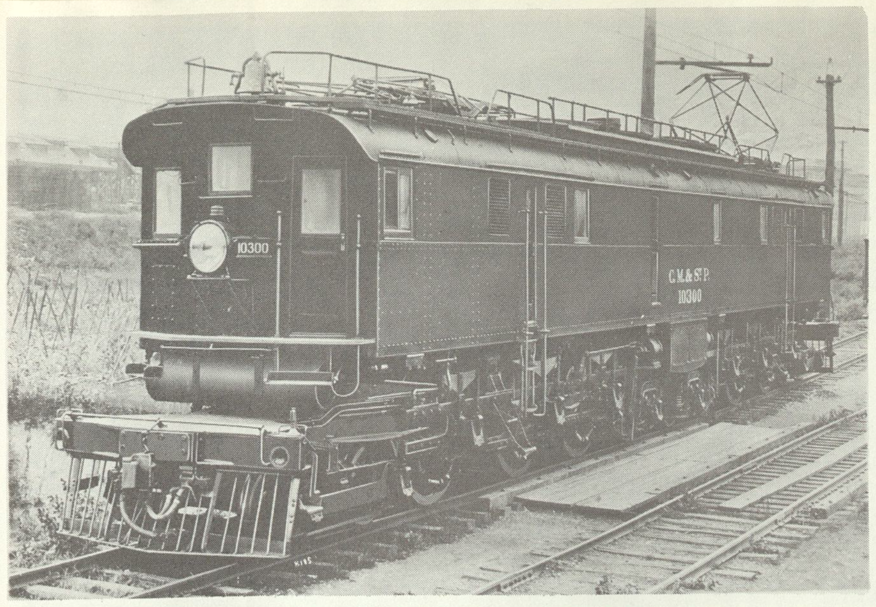


Jefferson River Cañon, Montana

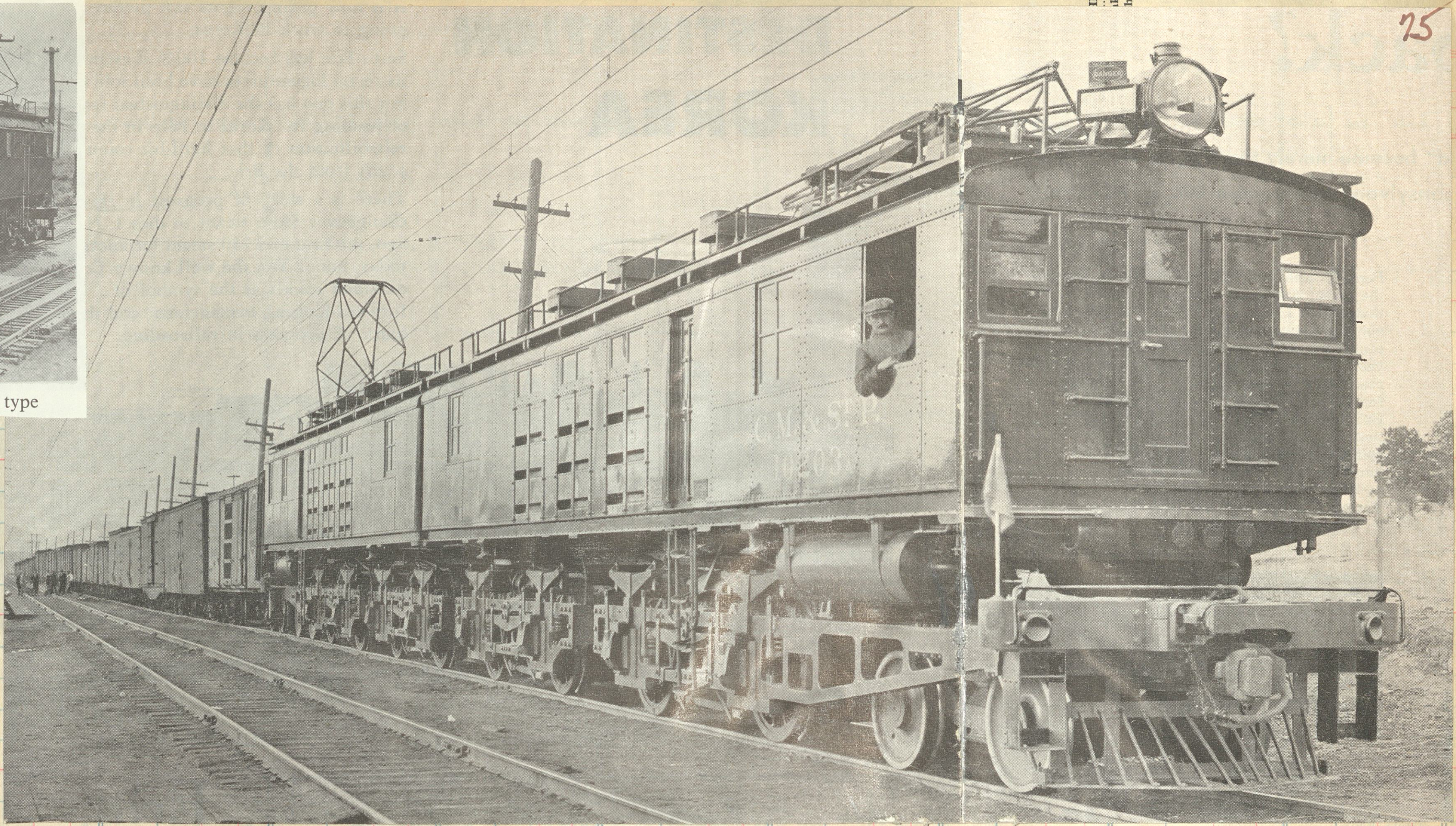
OKM

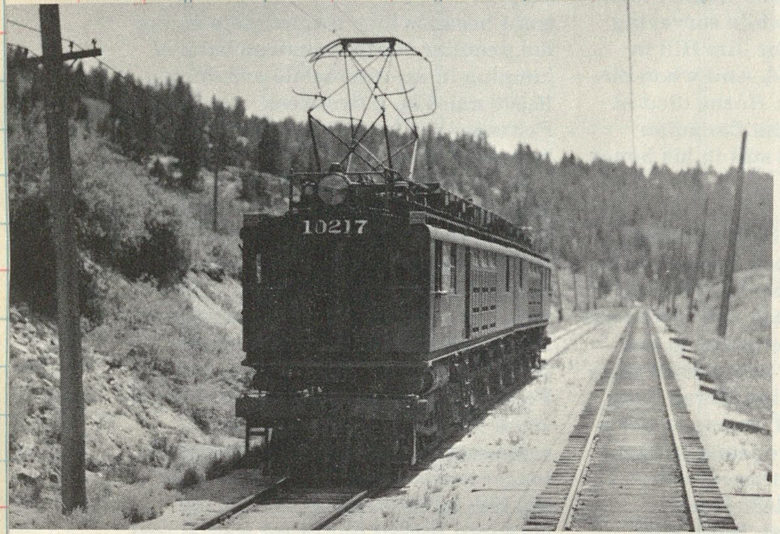
OKM

Clos. No. Sold


C.M.&St.P.
10300

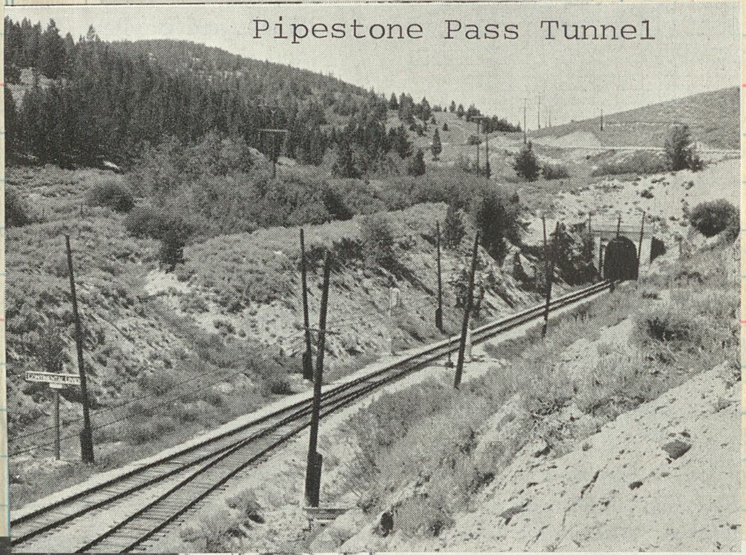
Chicago, Milwaukee & St. Paul #10300, 1921, 1-C-1-1-C-1 type


C.M.&St.P.
10203

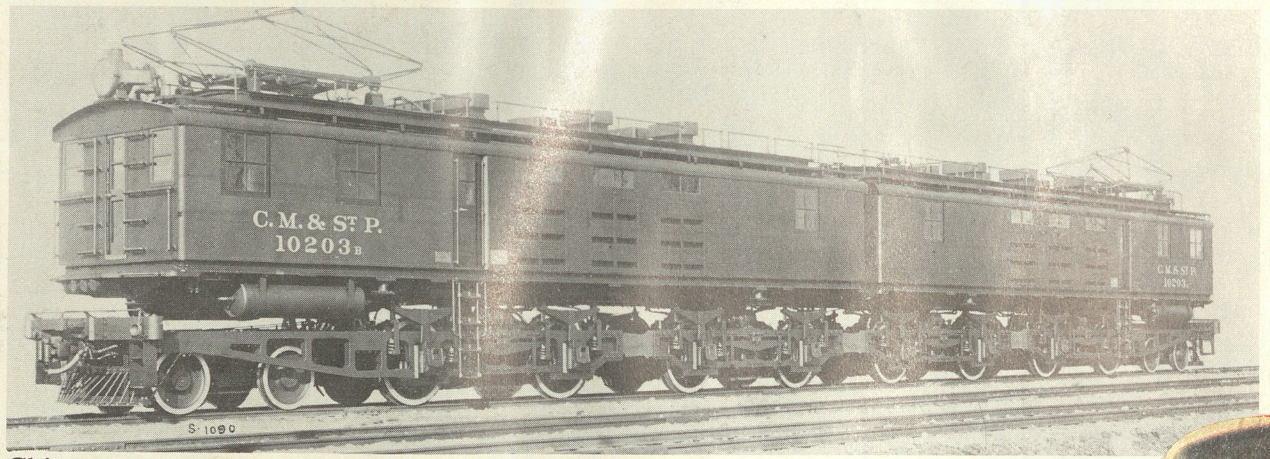


Hugh M. Comer

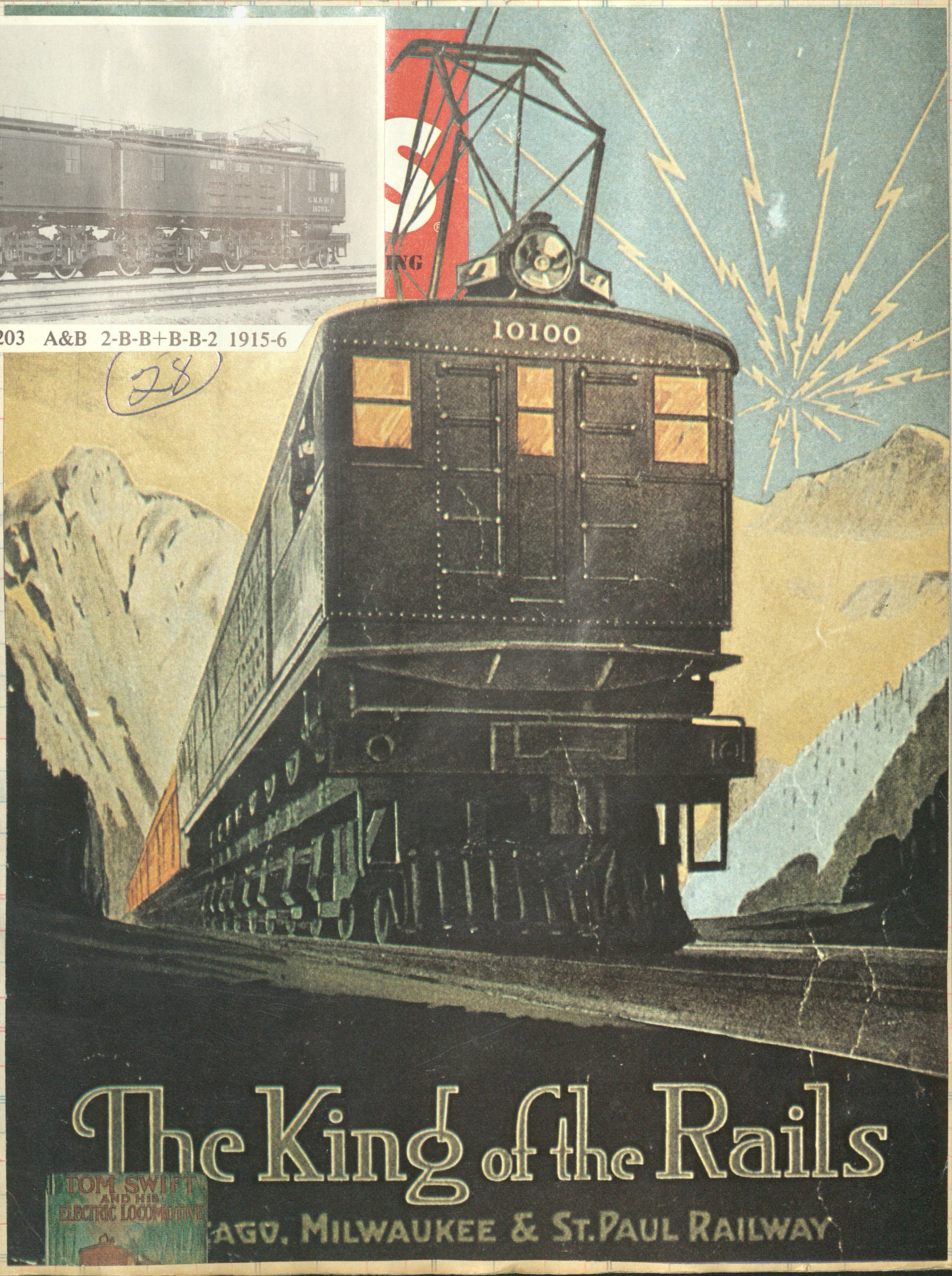
*GE box-cabs drift downgrade from Pipestone Pass in Montana after helping Milwaukee's finest up 2 per cent.*



Pipestone Pass Tunnel


C.M.&St.P.
10203B

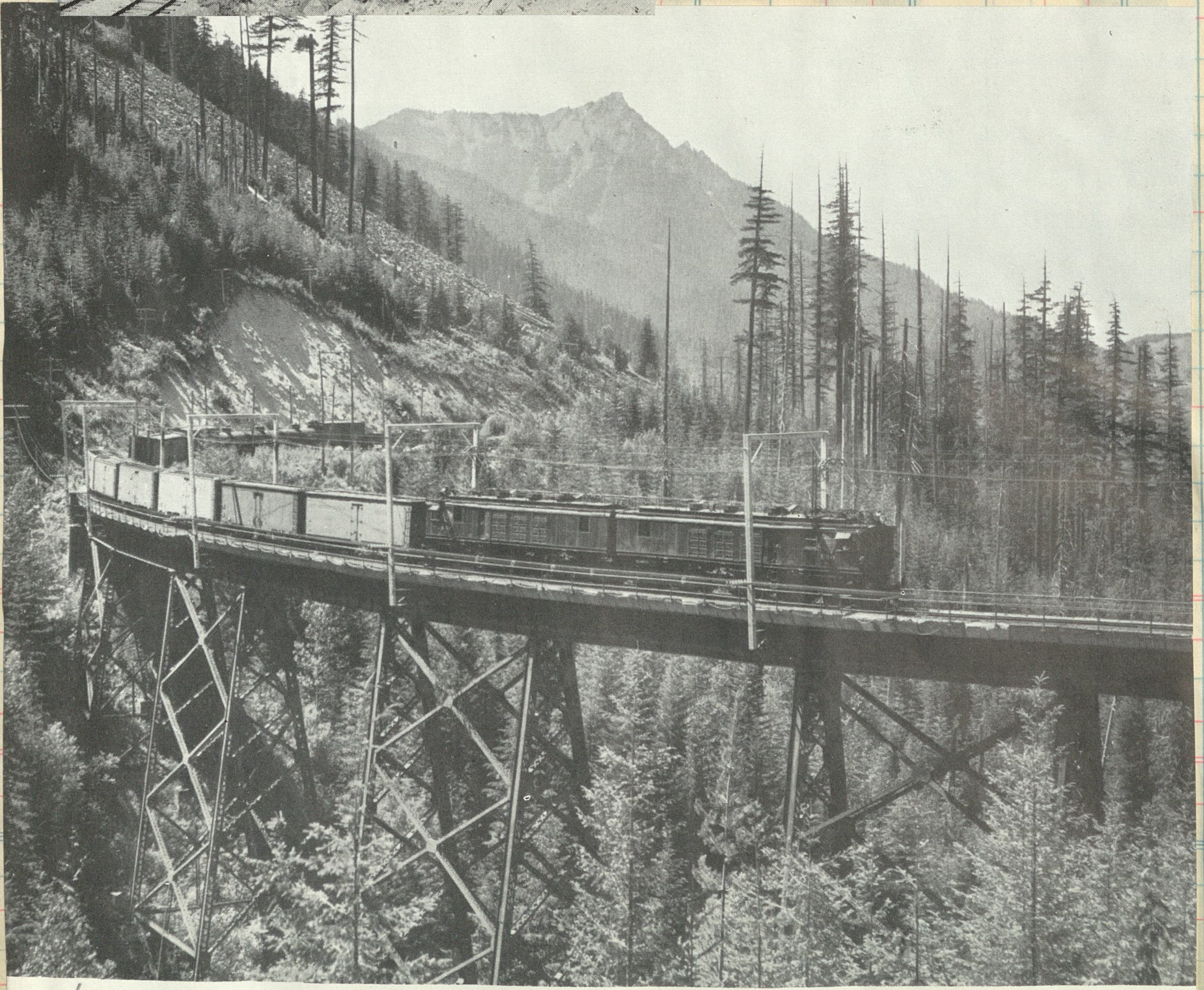
Chicago, Milwaukee & St. Paul 10203 A&B 2-B-B+B-B-2 1915-6


ING
10100
TOM SWIFT AND HIS ELECTRIC LOCOMOTIVE

(28)

The King of the Rails

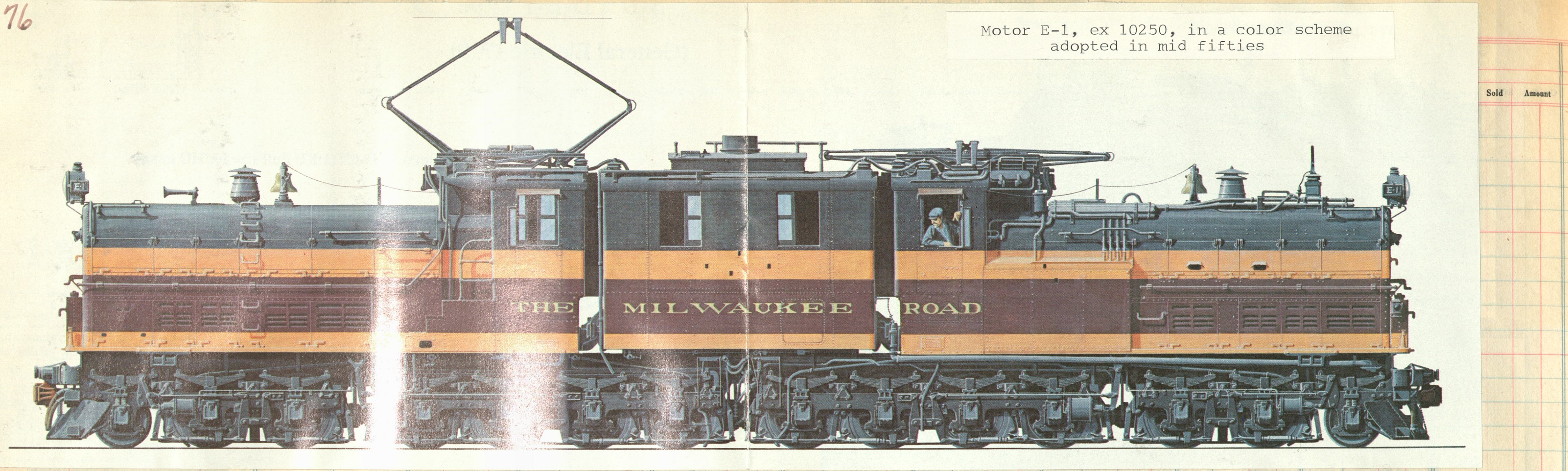
CAGO, MILWAUKEE & ST. PAUL RAILWAY



**MILWAUKEE ROAD FREIGHT DRAG** crosses Hanson's Creek Bridge in the Cascade Mts. of Washington, hauled by two big electric motors. This line pierces Cascade Range via the Snoqualmie Tunnel. (Courtesy of The Milwau-

76

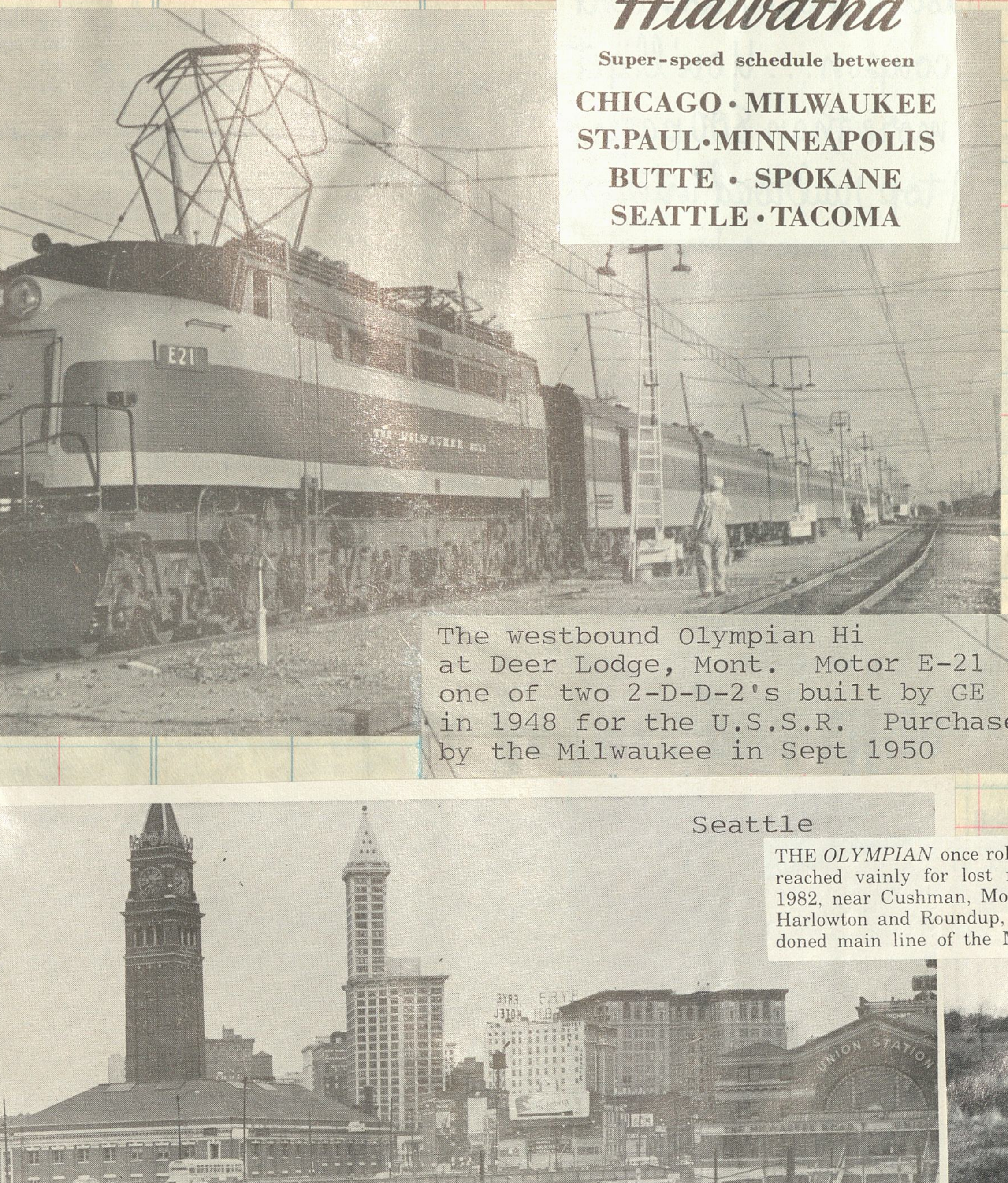
Sold Amount



Motor E-1, ex 10250, in a color scheme adopted in mid fifties

OLYMPIAN
HIAWATHA

*OLYMPIAN*
*Hiawatha*
Super-speed schedule between
**CHICAGO · MILWAUKEE**
**ST. PAUL · MINNEAPOLIS**
**BUTTE · SPOKANE**
**SEATTLE · TACOMA**



The westbound Olympian Hi at Deer Lodge, Mont. Motor E-21 one of two 2-D-D-2's built by GE in 1948 for the U.S.S.R. Purchased by the Milwaukee in Sept 1950

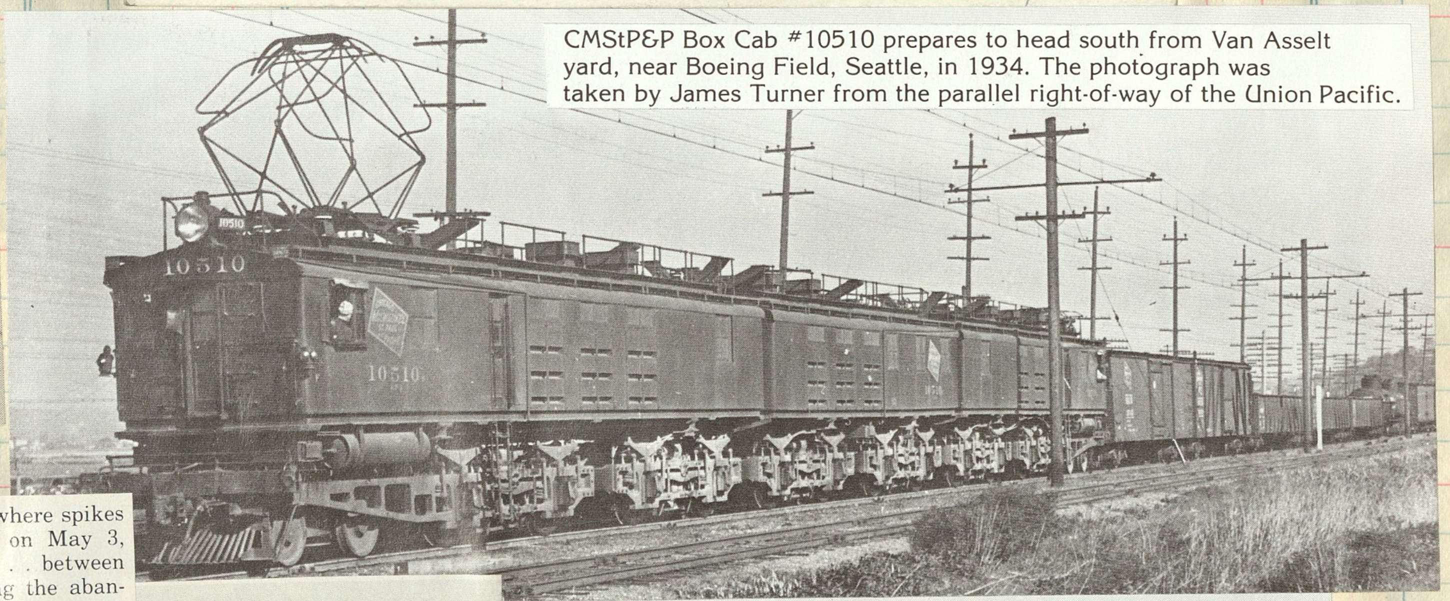
OKM

"ON THE CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD"

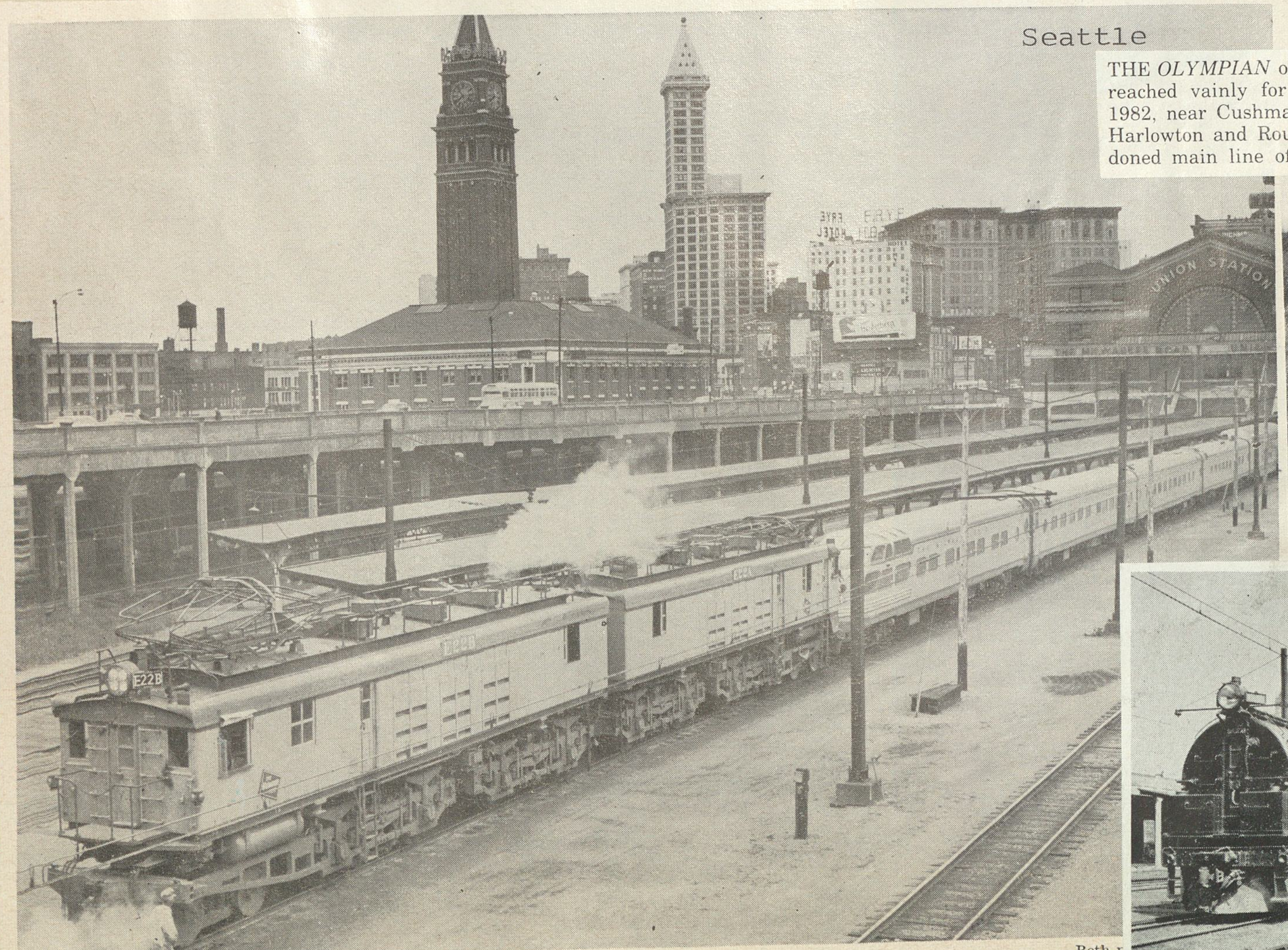
ONE OF MANY GRACEFUL CURVES, MONTANA CANYON

68996

CMStP&P Box Cab #10510 prepares to head south from Van Asselt yard, near Boeing Field, Seattle, in 1934. The photograph was taken by James Turner from the parallel right-of-way of the Union Pacific.

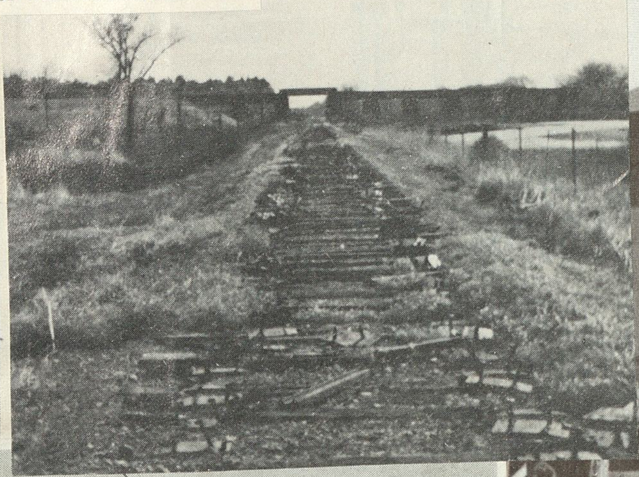


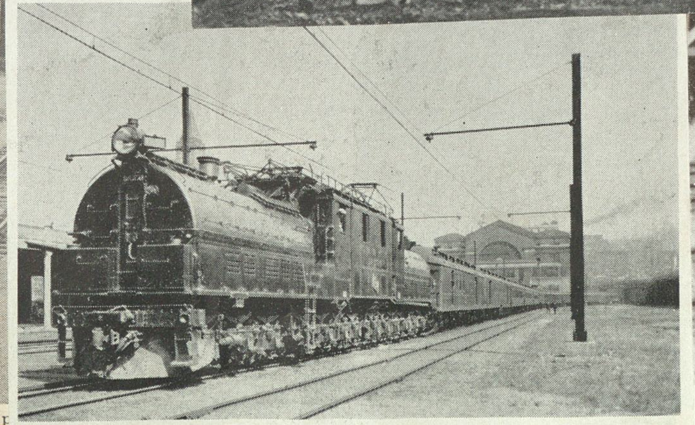
Seattle

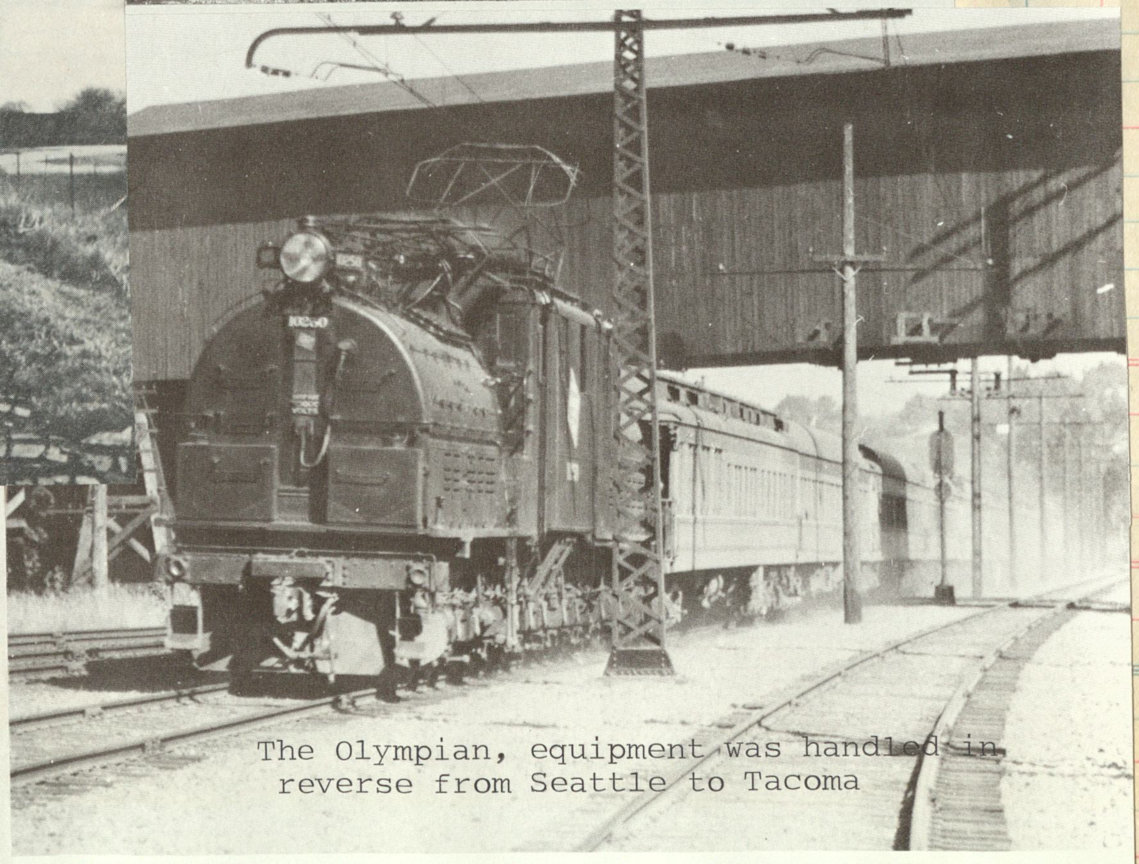


Both p

THE *OLYMPIAN* once rolled where spikes reached vainly for lost rails on May 3, 1982, near Cushman, Mont. . . . between Harlowton and Roundup, along the abandoned main line of the Milwaukee Road.





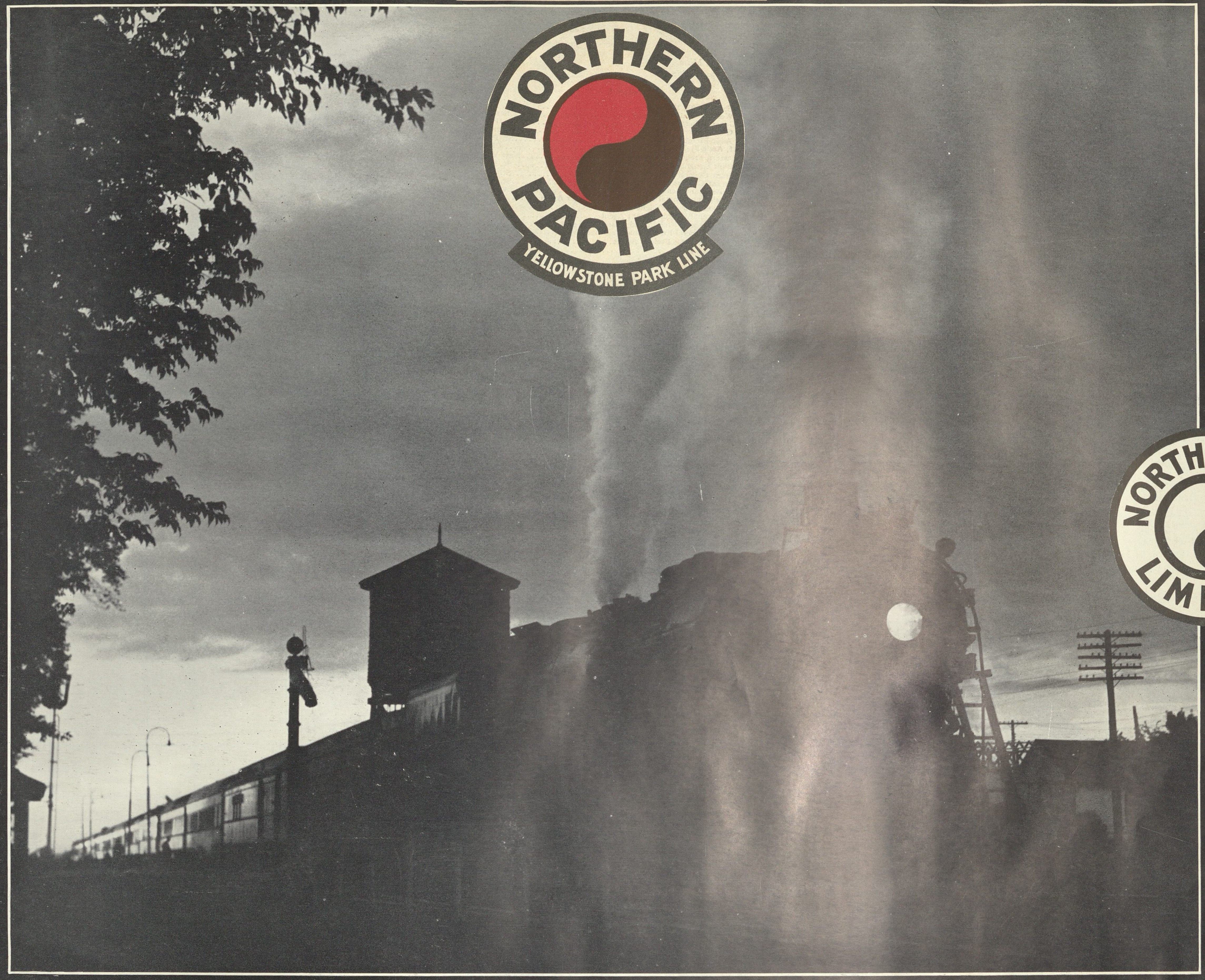


The Olympian, equipment was handled in reverse from Seattle to Tacoma

CMStP&P 10250 with a Tacoma-bound train under the Allentown covered bridge.

Clos. No. Sold Amount Clos. No. Sold

## *Main Street of the Northwest*



**Station Stop.**

Northern Pacific's North Coast Limited making a depot stop at dusk in Wadena, Minn. The twilight sky silhouettes a restless locomotive while the cars are illuminated by the platform lights. The photo is by Leslie Fox of the Wadena Pioneer Journal.

## PRIVATE BEDROOMS

Bedroom cars are now in year 'round service on the North Coast Limited, providing de luxe, private rooms at surprisingly low cost for travelers between Chicago, St. Paul - Minneapolis, Seattle and intermediate points . . . For travel in the West, go on the

**NORTH COAST LIMITED**

### TRAIN No. 2 (Eastbound)

**Via Northern Pacific Ry. Seattle-Tacoma via Spokane and Butte to Minneapolis-St. Paul. C. B. & Q. R. R. St. Paul to Chicago. Connections at Pasco from Portland.**

**Observation Club Car—Air-Conditioned** (Radio, Barber, Valet, Ladies' Lounge, Buffet, two Shower Baths).
Seattle-Tacoma to Chicago.
Portland to Pasco. (Via S. P. & S.)

**Pullman Standard Sleeping Cars—Air-Conditioned:—**
Seattle to Chicago, 10 Section, 1 Compartment, 1 Drawing Room.
Seattle to Chicago, 6 Bedrooms, 6 Sections.
Portland to Chicago, 10 Section, 1 Compartment, 1 Drawing Room (Via S. P. & S., Portland to Pasco).
Tacoma to Chicago, 10 Section, 1 Compartment, 1 Drawing Room. (Car leaves Tacoma, Train No. 459 at 8:10 p. m., arriving Seattle 9:20 p. m. Leaves Seattle on N. P. Train No. 2 at 9:45 p. m.)
Butte to Kansas City (Via C. B. & Q. Train No. 44 from Billings), 12 Section, 1 Drawing Room.

**Pullman Tourist Sleeping Cars—Air-Conditioned:—**
Seattle to Chicago, 16 Section.
Portland to Chicago, 16 Section. (Via S. P. & S. to Pasco, thence N. P. Ry.)

**Dining Car—Air-Conditioned:—**
Seattle to Chicago.
(A la carte service; also club breakfasts, 50c to $1.00. Special plate luncheons and dinners, 50c and casserole service, 75c. Table d'hote luncheon, $1.00. Table d'hote dinner, $1.25. Tray service at popular prices in coaches and tourist cars.

**Coach—New, De Luxe Air-Conditioned.**
Form-fitting reclining chairs, diffused lighting, ladies' lounge and dressing rooms, men's lounge.
Seattle to Chicago. Helena to Logan.
Portland to Chicago. (Via S. P. & S. to Pasco and N. P. Ry.)
Winnipeg to St. Paul. With Reserved Seats. (On Train 14 from Winnipeg to Manitoba Jct., Train 2 to St. Paul.)
Staples to Duluth (on No. 56).

1946

The Beautiful Absarokas near Livingston, Montana.

In 1927 operated
6,649 miles with
1249 engines, 1026
passenger and 49625
freight cars

## GRAND CIRCLE TOUR

1940

You can circle the nation, see both Pacific and Atlantic coasts, visit both great world's fairs in San Francisco and New York—all on one rail ticket at this low cost. Your complete itinerary planned. Ask your N. P. Agent for details or write E. E. Nelson, Passenger Traffic Manager, Northern Pacific Ry., St. Paul, Minn.

IN COACHES $90

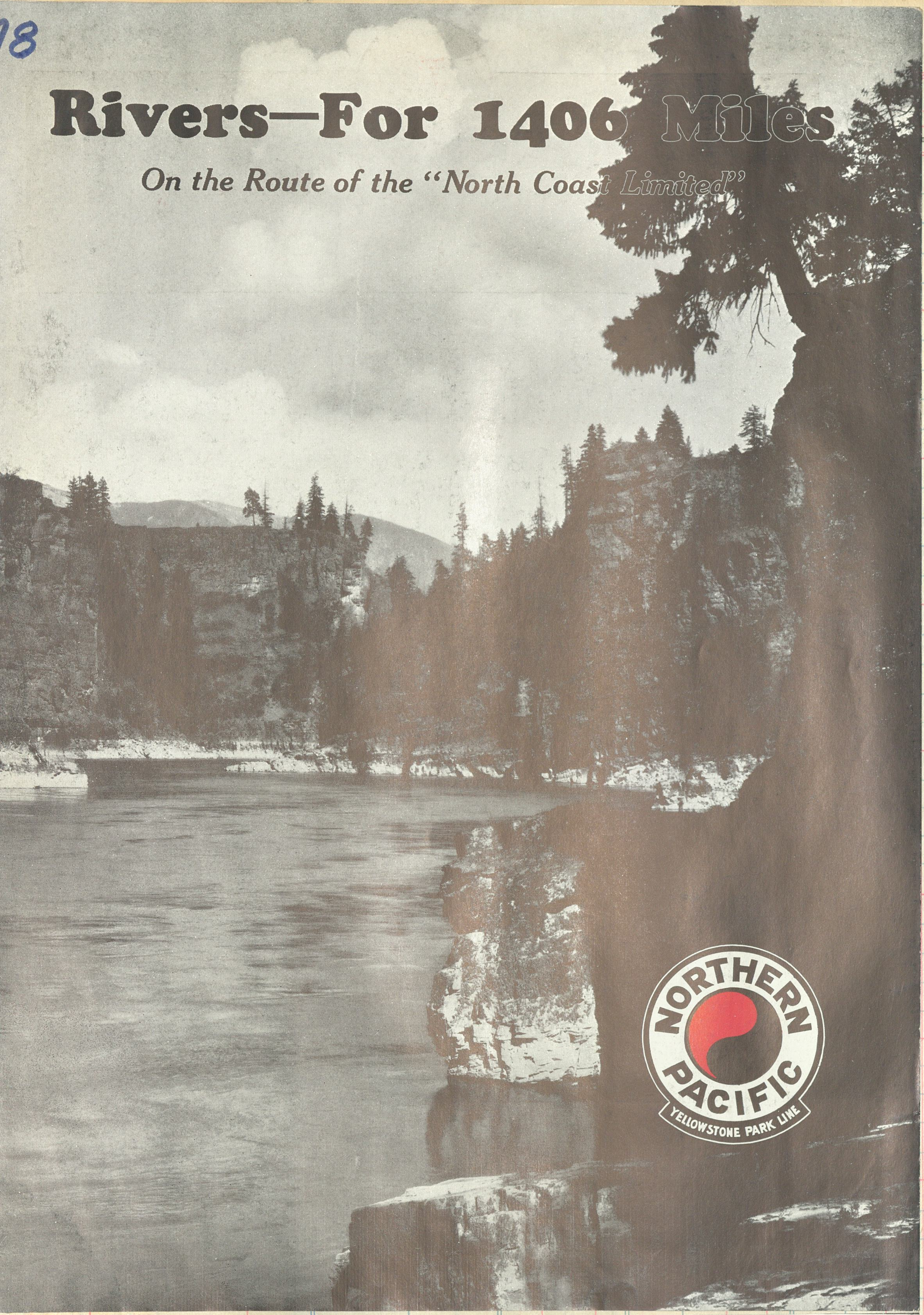
IN STANDARD PULLMANS (Berth Extra) $135

## Oldest of the Northern transcontinental railroads.

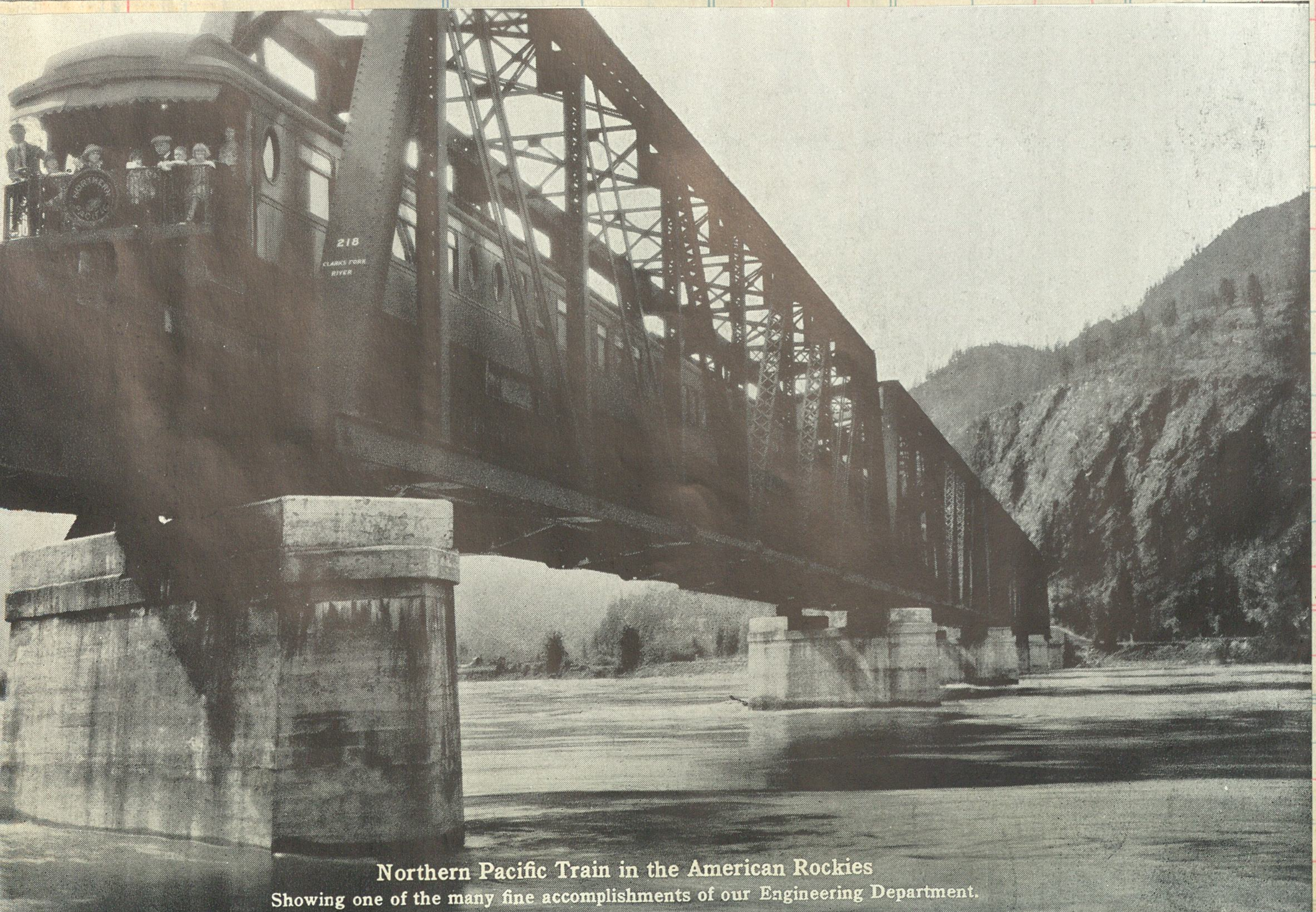
Northern Pacific, with its 6682 miles stretching from Duluth and the Twin Cities to Seattle, Tacoma, and Portland, was the second of the transcontinentals, first by the northern route. The line to Tacoma via Portland was finished in 1883. NP is a big railroad and a varied one. It hauls ore and coal, wheat and lumber, silks and oils from the Orient. Until two months ago it owned the world's largest locomotives.

# Rivers—For 1406 Miles

*On the Route of the "North Coast Limited"*


NORTHERN PACIFIC
YELLOWSTONE PARK LINE

The Yellowstone River in Montana
341 Miles of Train-Window Pictures.

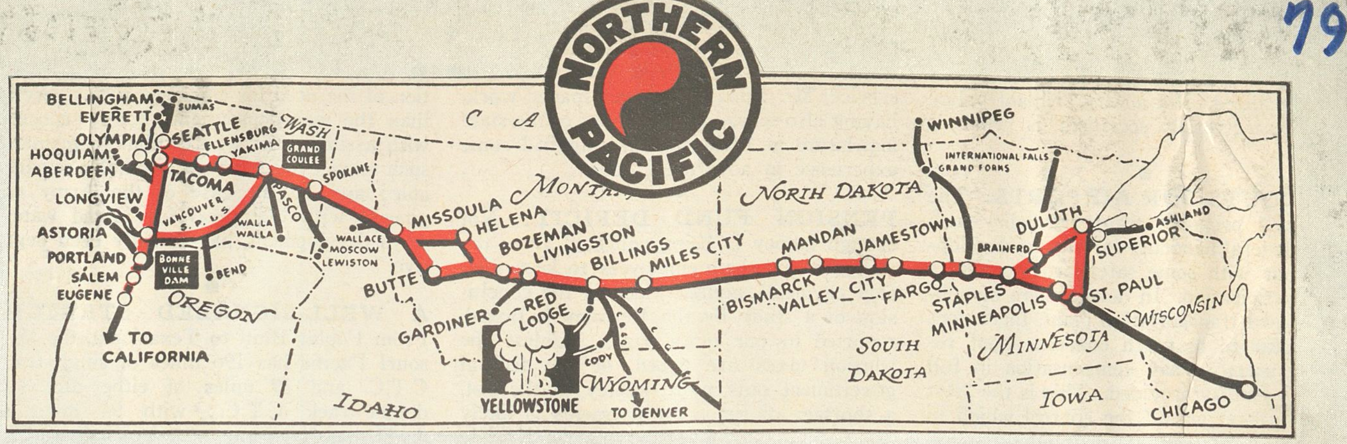


Northern Pacific Train in the American Rockies
Showing one of the many fine accomplishments of our Engineering Department.

The Pend d'Oreille River, Idaho
Our trains cross Lake Pend d'Oreille on a mile-long viaduct.

Jefferson River and Canyon
32 Miles Along this Stream in Montana.

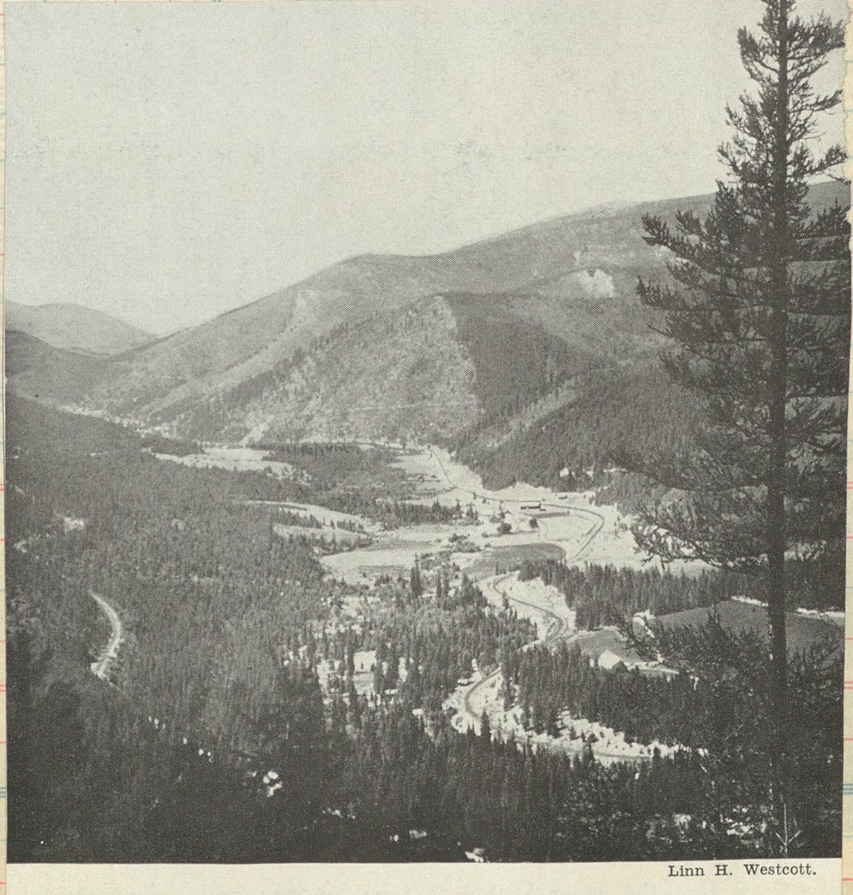
Clark's Fork River
Our trains follow this river for 93 miles.



NORTHERN PACIFIC
BELLINGHAM
SUMAS
EVERETT
OLYMPIA
SEATTLE
HOQUIAM
ABERDEEN
TACOMA
ELLENSBURG
YAKIMA
WASH
GRAND COULEE
SPOKANE
C A
LONGVIEW
VANCOUVER
S.P.&S.
PASCO
WALLA WALLA
ASTORIA
PORTLAND
SALEM
EUGENE
BONNEVILLE DAM
BEND
OREGON
TO CALIFORNIA
WALLACE
MOSCOW
LEWISTON
IDAHO
MISSOULA
HELENA
MONTANA
BUTTE
BOZEMAN
LIVINGSTON
GARDINER
RED LODGE
YELLOWSTONE
BILLINGS
CODY
WYOMING
TO DENVER
MILES CITY
NORTH DAKOTA
BISMARCK
MANDAN
VALLEY CITY
JAMESTOWN
FARGO
SOUTH DAKOTA
WINNIPEG
INTERNATIONAL FALLS
GRAND FORKS
BRAINERD
STAPLES
MINNEAPOLIS
MINNESOTA
DULUTH
SUPERIOR
ASHLAND
ST. PAUL
WISCONSIN
IOWA
CHICAGO

Picture Rock, Missouri River Canyon
We Follow the Missouri for 45 Miles.

Through the Montana Rockies into Idaho

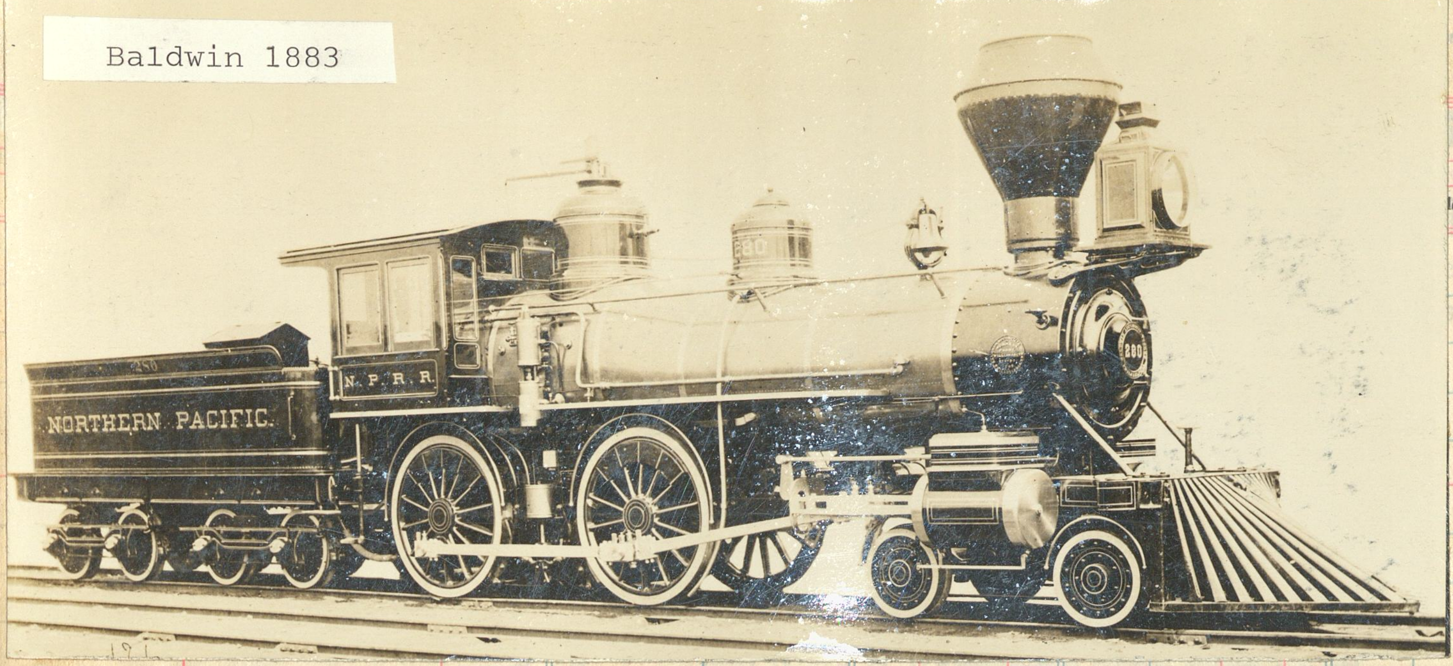


Linn H. Westcott.

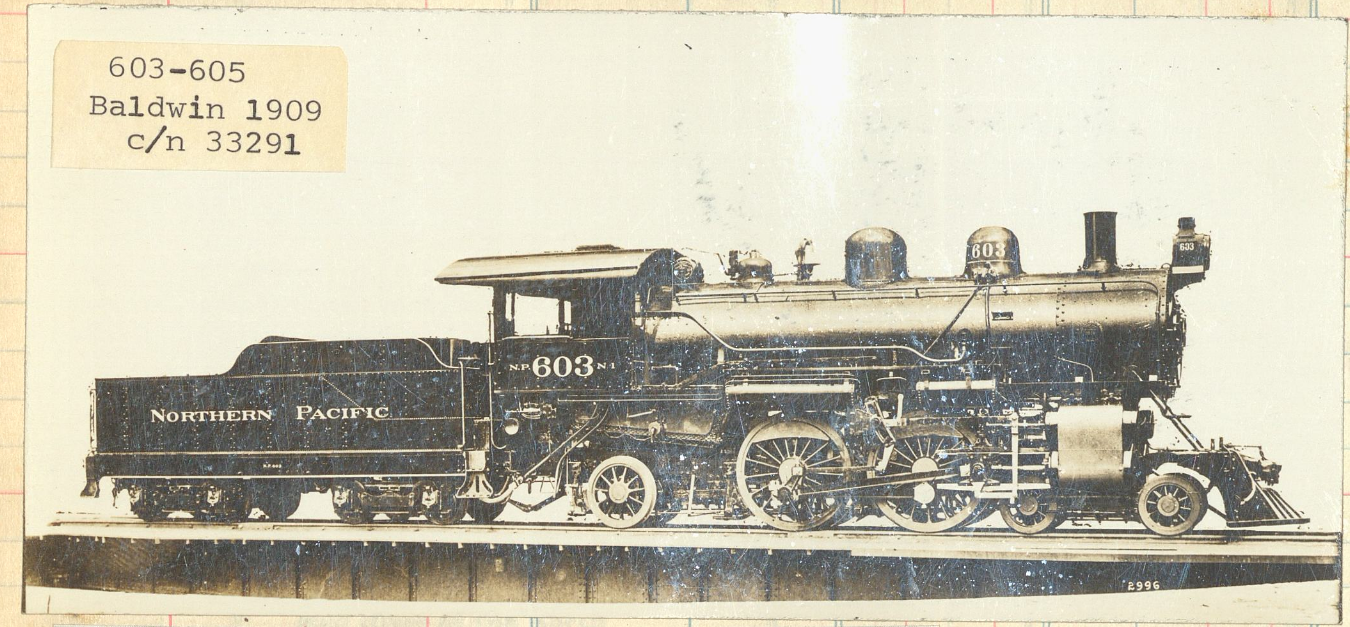
NP follows the valley of the Coeur d' Alene.

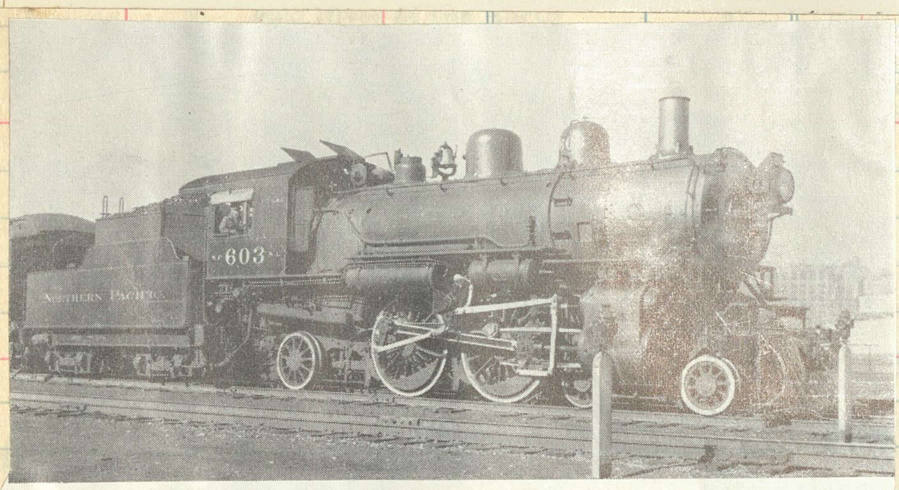
This is the first view seen from a westbound train as it crosses the Bitter Root divide. Two other levels of track may be seen below. Mullan nestles in valley to left; mines are in side canyons to right.

Baldwin 1883



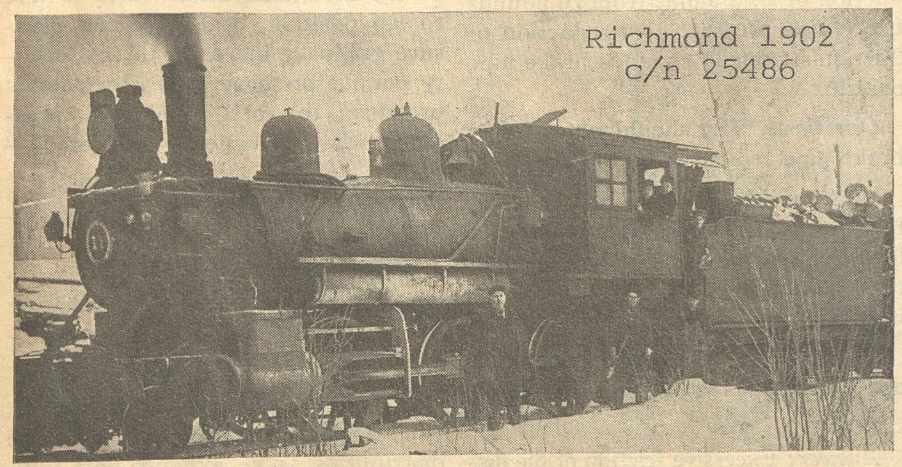
603-605
Baldwin 1909
c/n 33291





The Atlantic was never as popular on the NP as it was on the GN and CMStP&P; the road owned just six in its history. Three were inherited from the St. Paul & Duluth, labeled as class S. The other three S-1 machines, like No. 603, were built by Baldwin in 1909. All are now scrapped.

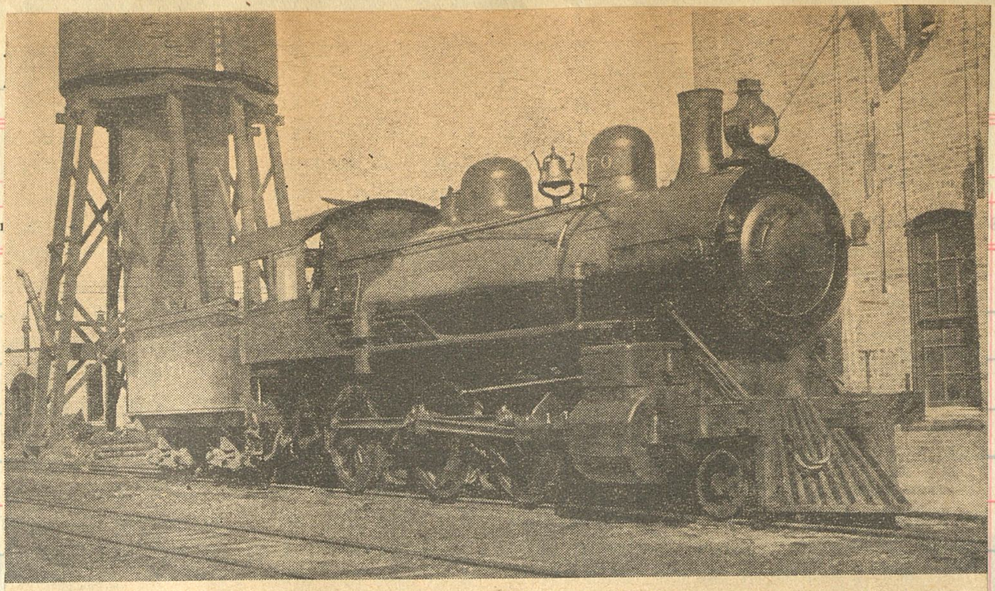
Richmond 1902
c/n 25486



OLD ENGINE 11 OF THE MINNESOTA & INTERNATIONAL RY. IN 1908

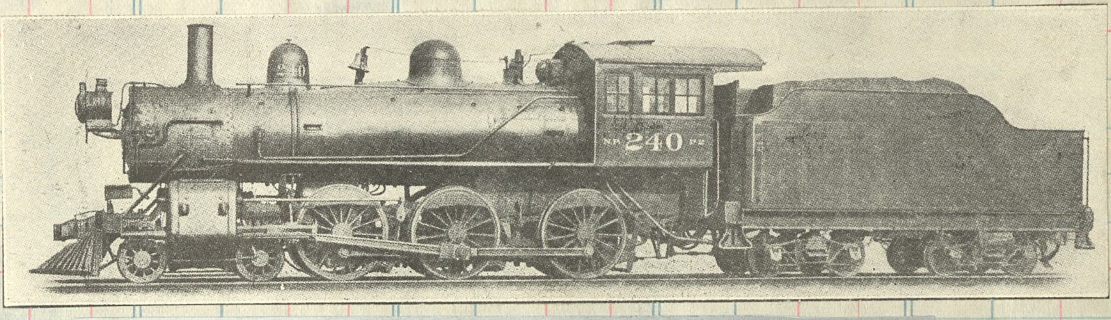
X 1336 dent
Missoula Apr 43

Amount Clos. No. Sold Amount

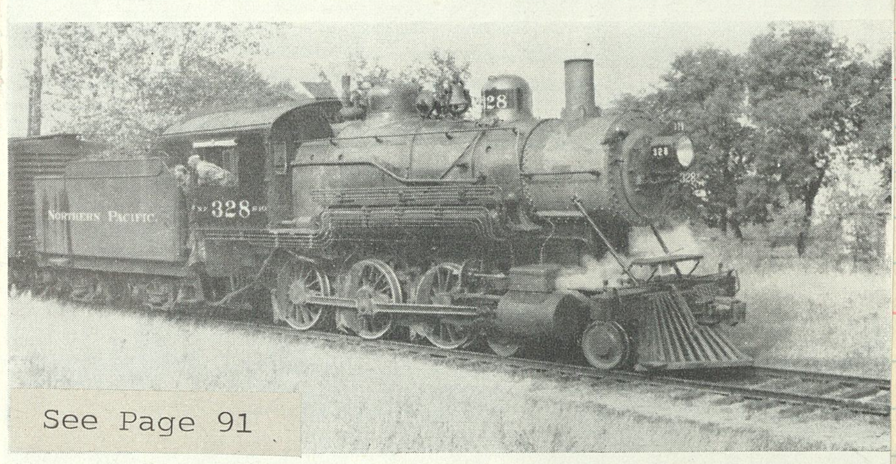


NORTHERN PACIFIC paid Schenectady $12,847.61 for this ten-wheeler in 1897. One of today's 4-6-6-4's costs twenty times that figure

170-176
C/N 4535

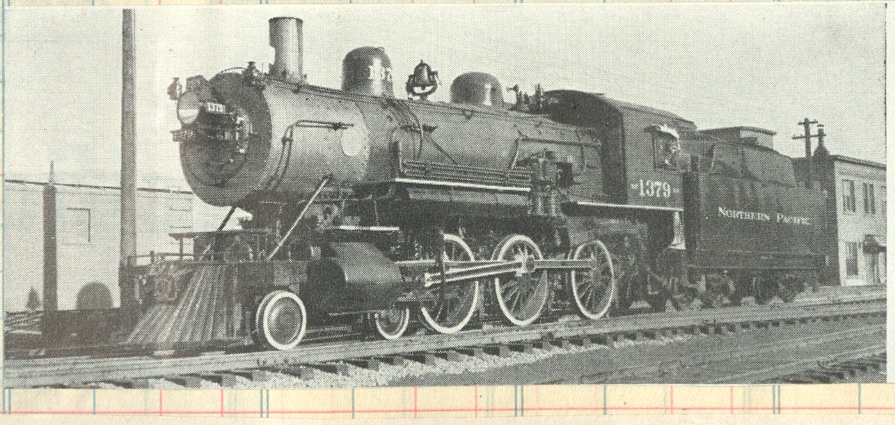


240-241 c/n 5716 Schenectady 1900



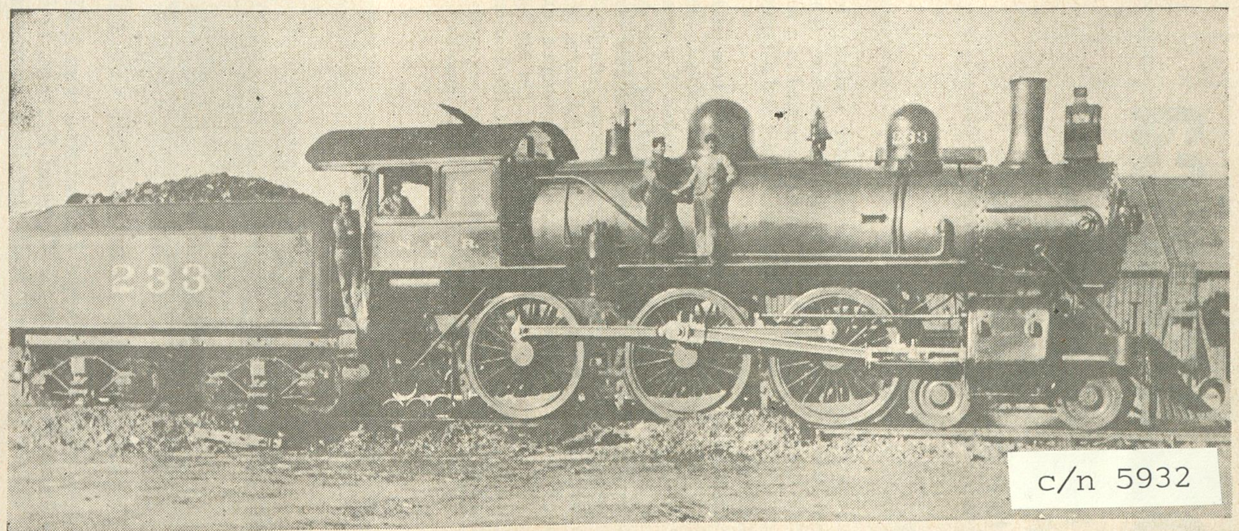
See Page 91

This top-heavy Ten-Wheeler, built by Alco's Rogers Works in 1907, is the last of 10 rough-riding S-10 locomotives which were reportedly designed and built for Russia but never shipped. No. 328 worked the majestically scenic Taylors Falls branch until it was ripped out in 1948.



## Class S-4 Ten-Wheeler

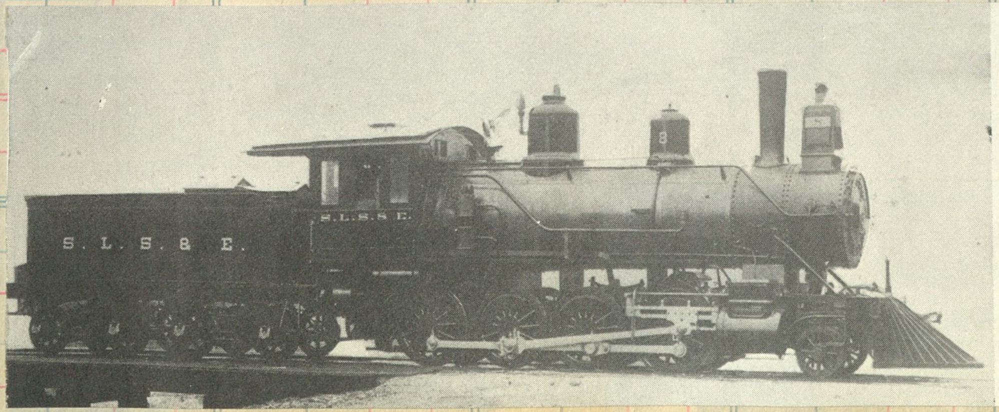
Baldwin built 40 of these handsome 4-6-0's as Vauclain compounds in 1902, and only five have been scrapped. All were rebuilt to simple locomotives. One unusual trait of the S-4 is that it is never seen east of the Rocky Mountain Division; this causes many an eastern district engineer to exclaim, "There ain't no such animal as a 1300!" No. 1379 is pictured in Livingston.



c/n 5932

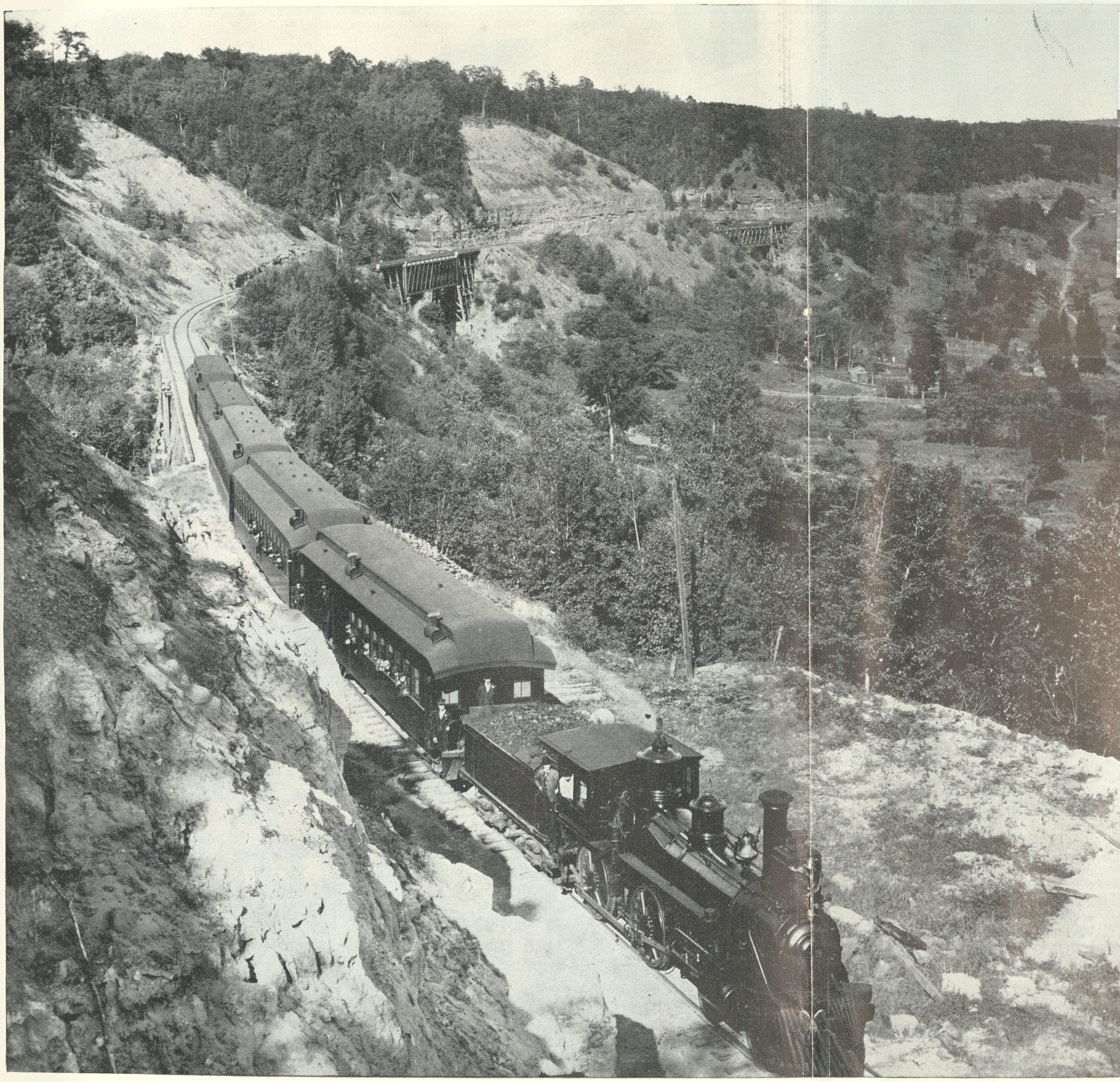
In June Of 1901, Schenectady delivered four [233-236] of these fast stepping 4-6-0's to work the North Coast Ltd.

Had cyls 20x26, dvs 73",BP 200# T E 24,200. Tank held 9 ton and 4350 gals.



c/n 2496

Seattle, Lake Shore & Eastern Engine 8 was a 2-8-0 built by Richmond in 1895, Shop No. 2496. She became Seattle & International's No. 8, then Northern Pacific 47 and was rebuilt to an 0-8-0 type.
(Collection of Dr. S. R. Wood)

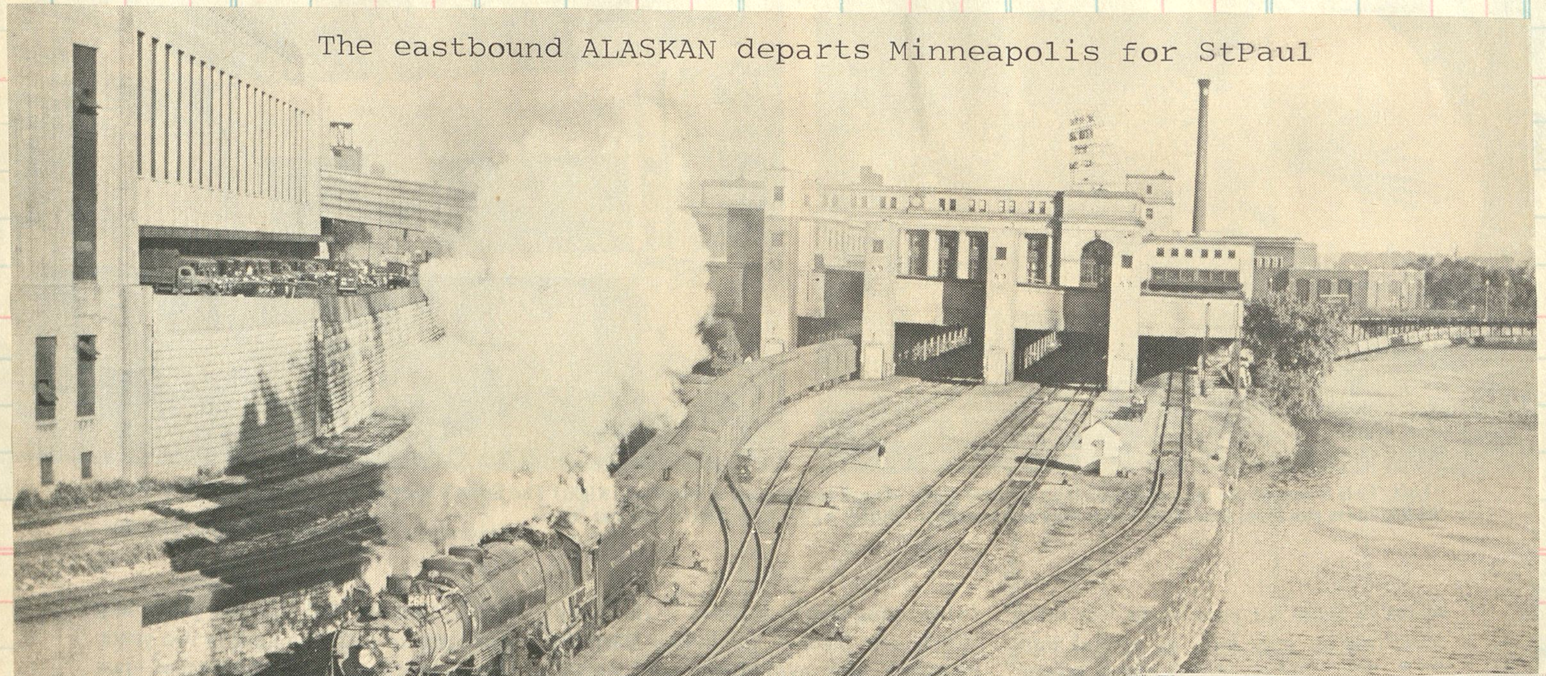


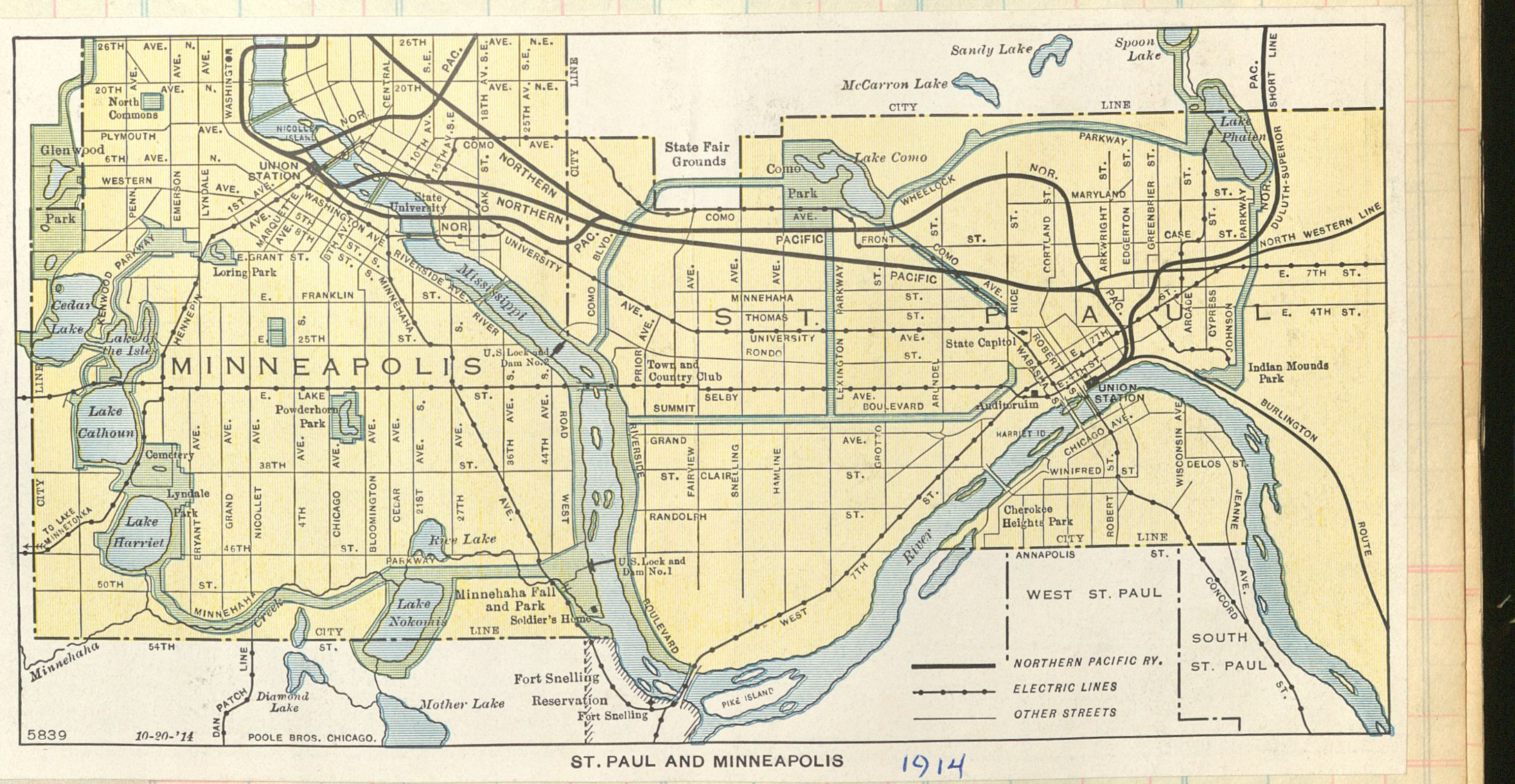
The 666 leads Trn #68 out of
St Paul for Taylors Falls
[1934]

# Along the St. Croix

This year Northern Pacific ceased operation of its 20-mile Taylors Falls Branch, and one of the most intriguing railroad lines in the nation passed into memory's album. The little railroad was built in 1880 up the St. Croix River Valley from its connection with NP's present St. Paul-Duluth main line at Wyoming, Minn. At first it was jointly owned and operated by the Taylors Falls & Lake Superior Railroad and the Minneapolis & St. Louis, then by the M&StL and the St. Paul & Duluth Railroad. Later the StP&D took over its operation until that company was absorbed by the Northern Pacific in 1900. When this classic photograph was taken, the StP&D's No. 18, a wonderfully clean Rogers product of 1883, was moving a substantial five-car train west from Taylors Falls. The 4-4-0 was scrapped in 1920, the line in 1948. Today the land below down to the river is a Minnesota state park, the trees have grown tall and have almost obscured the railroad embankment, and the twisting dirt road in the right background is a triple-lane highway. Tourists no longer ride the trains to Taylors Falls for hunting and fishing along the St. Croix or for sightseeing parties to the deep, bottle-shaped potholes.

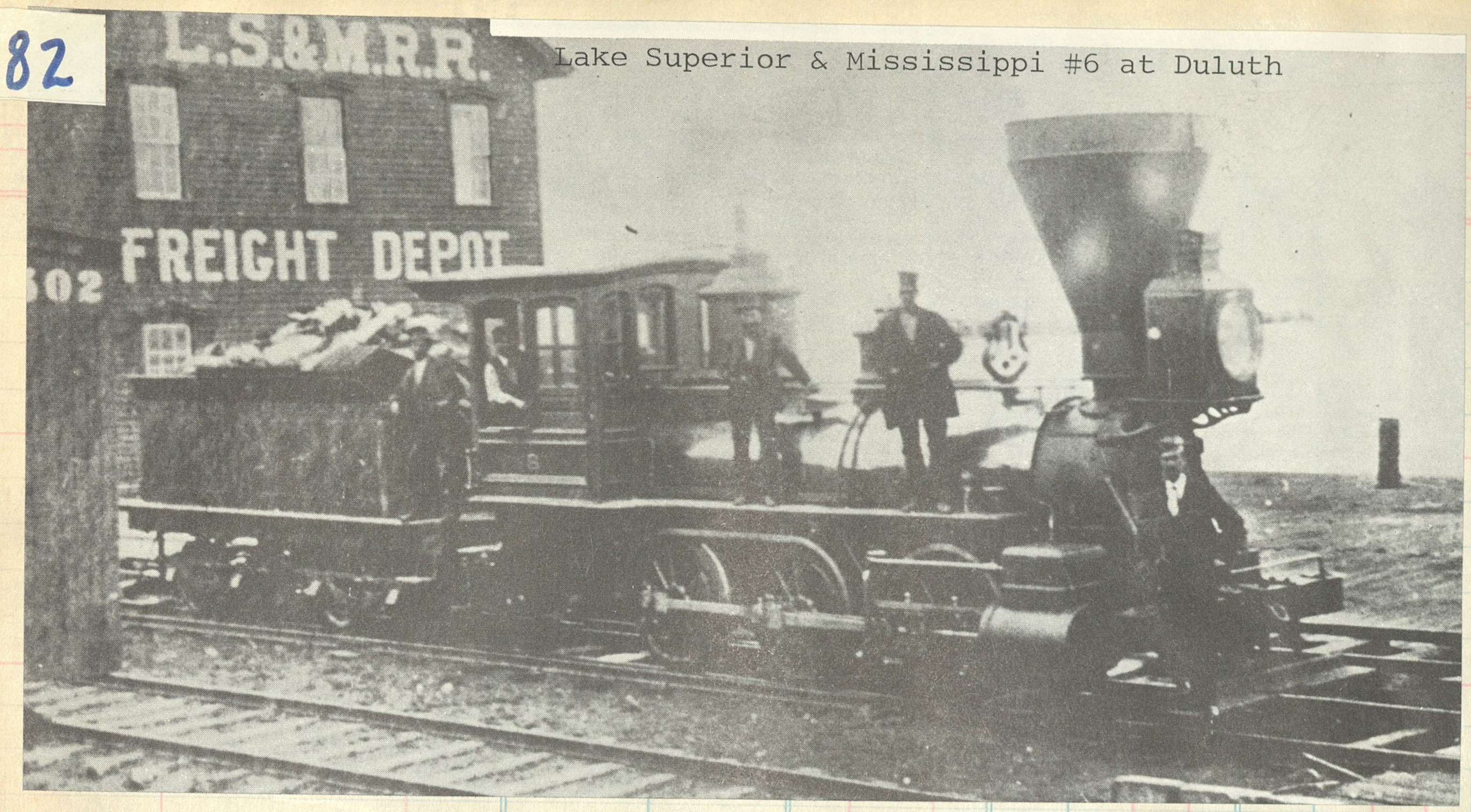
The eastbound ALASKAN departs Minneapolis for StPaul




MINNEAPOLIS
ST. PAUL
WEST ST. PAUL
SOUTH ST. PAUL
UNION STATION
State University
State Fair Grounds
Como Park
Lake Como
Lake Phalen
McCarron Lake
Sandy Lake
Spoon Lake
Glenwood
Cedar Lake
Lake of the Isles
Lake Calhoun
Lake Harriet
Lake Nokomis
Powderhorn Park
Loring Park
Minnehaha Fall and Park
Fort Snelling Reservation
Mississippi River
State Capitol
Indian Mounds Park
Cherokee Heights Park
NORTHERN PACIFIC RY.
ELECTRIC LINES
OTHER STREETS
5839
10-26-'14
POOLE BROS. CHICAGO.

ST. PAUL AND MINNEAPOLIS 1914

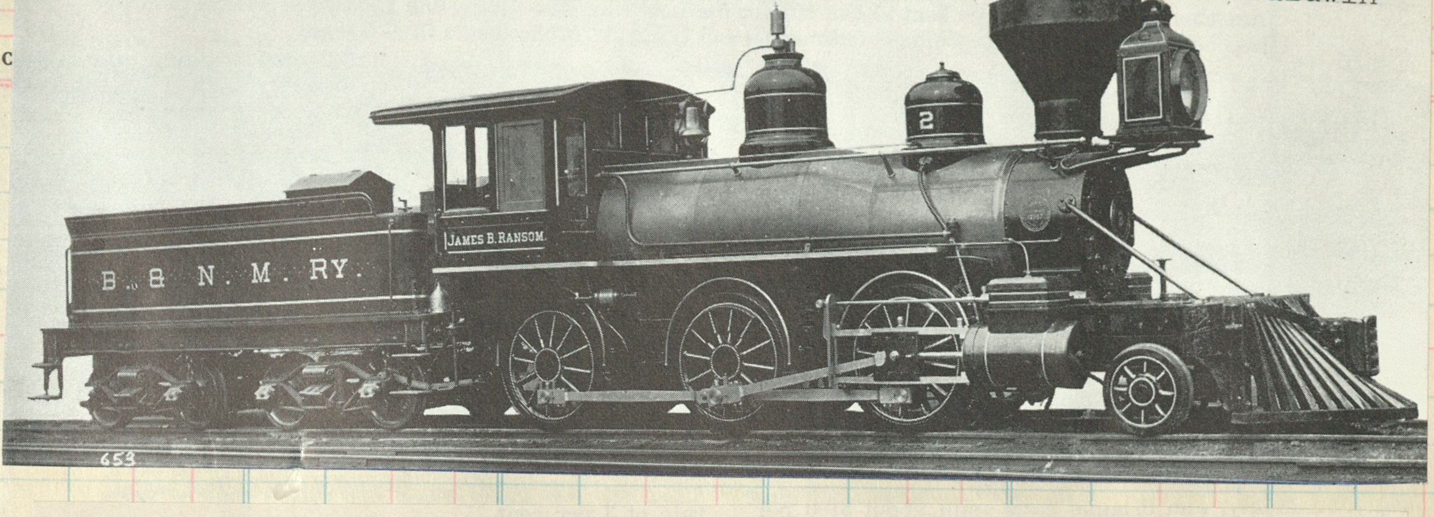
Lake Superior & Mississippi #6 at Duluth

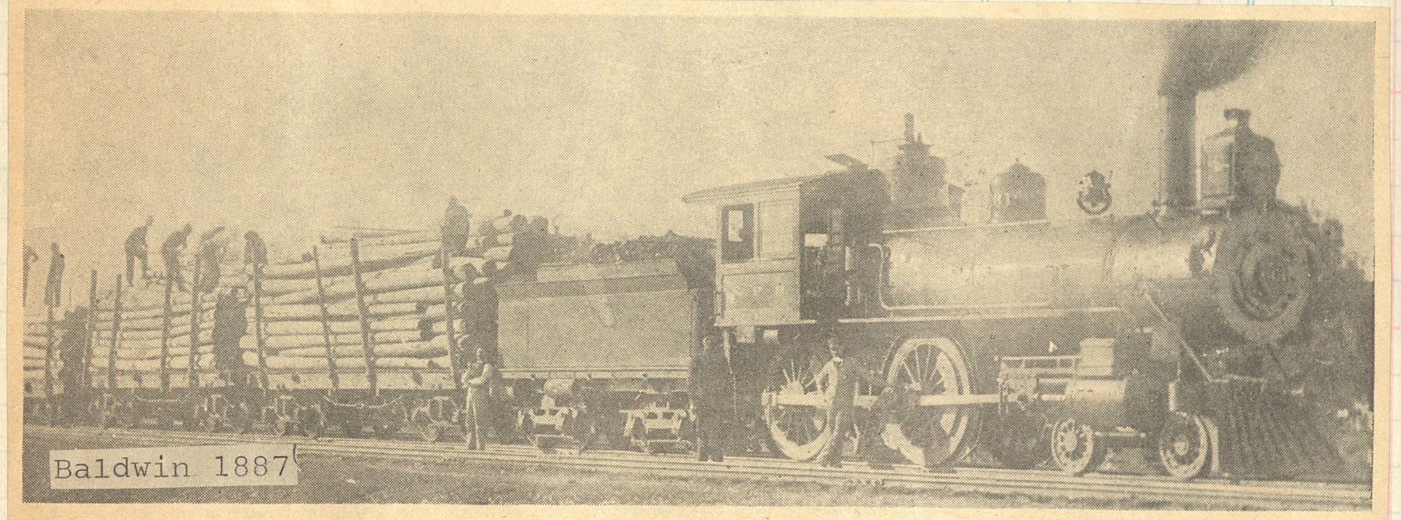


BRAINERD & NORTHERN MINNESOTA RAILWAY No. 2, the James B. Ransom. 1892. (Collection of C. A. Brown)

later Minnesota & International Falls

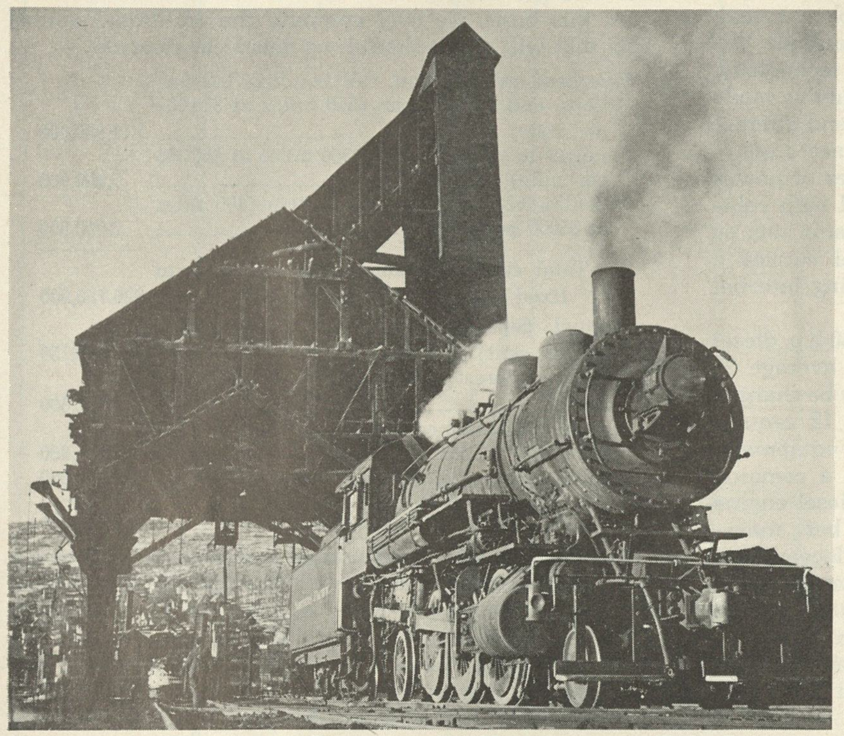
Baldwin





Baldwin 1887

NORTHERN PACIFIC'S ENGINE 661 AT STAPLES, MINN., IN 1898



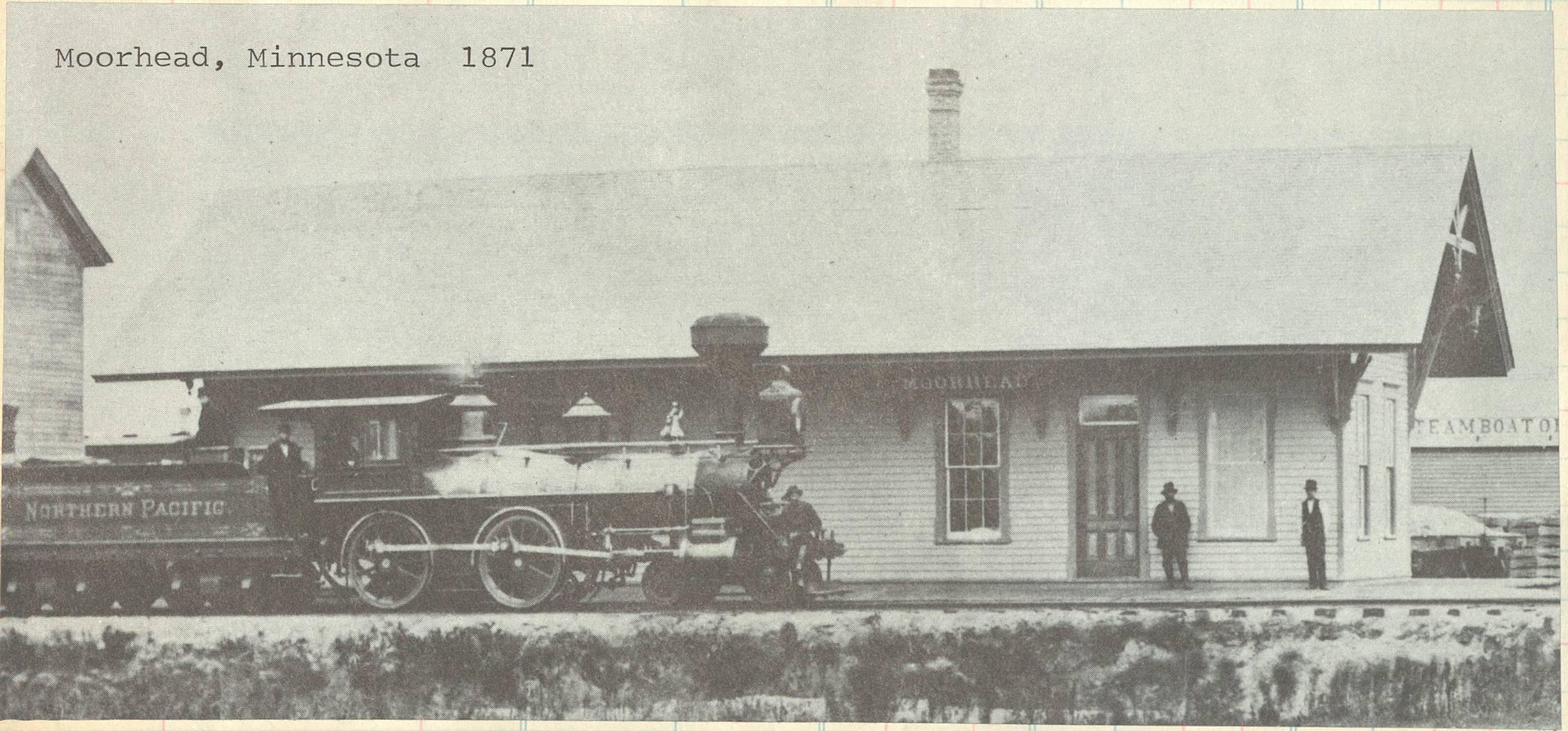
COAL dock at the NP roundhouse in Duluth, Minn., in 1957. William D. Middleton.

## THE COAL DOCK

*This is a roundhouse coal dock.*
*Where the steamers stop no more.*
*Where memories ride the buckets.*
*Where no one remembers the score.*
*Visions of wintry evenings,*
*Remembrances of mornings bright,*
*Her quivering, groaning catwalk,*
*Her towering, dizzy height.*
*Home for countless pigeons,*
*Who coo and fly in and out.*
*Past the inside, winding stairway*
*That leads to coal's redoubt.*
*The shadows of near-disasters*
*As someone fell down a chute.*
*The feverish rush to get the guy out,*
*The fears of impending suit.*
*But the coal dock is still the emblem*
*Of labor and dirt and of work,*
*And the loss of this sign may fade with time.*
*But her frame still shines through the murk.*

— Webster E. Wing.

Moorhead, Minnesota 1871

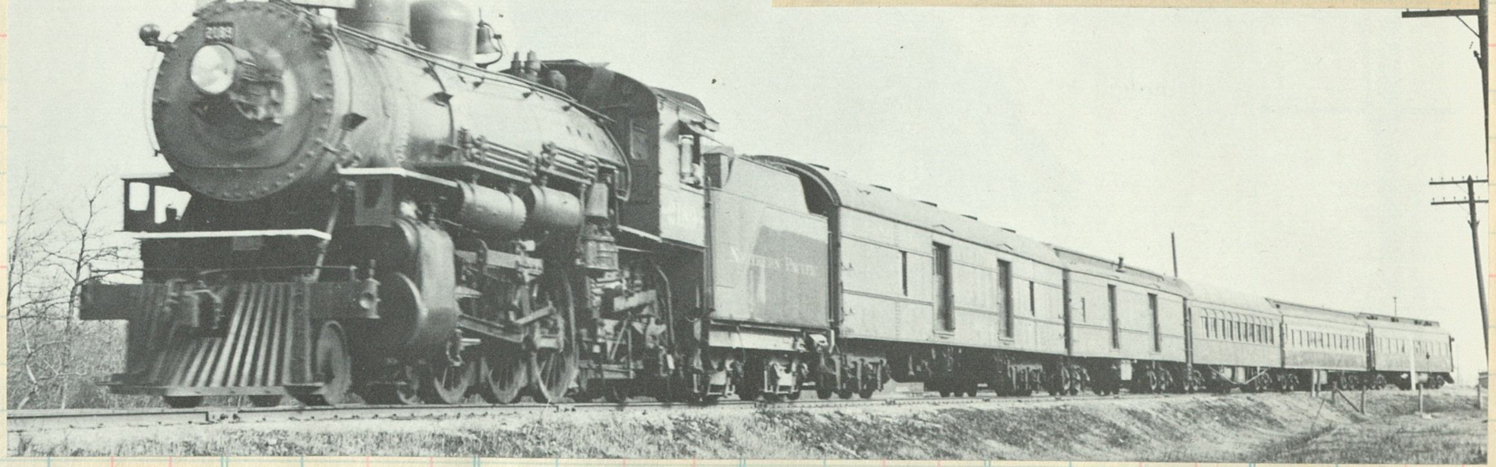


**No. 14-8—Winnipeg to St. Paul** (See Table 18)

**Deluxe Coach—Air-Conditioned:—**
Winnipeg to Minneapolis-St. Paul. Train No. 14 to Manitoba Jct.; Train No. 8, Manitoba Jct. to St. Paul.

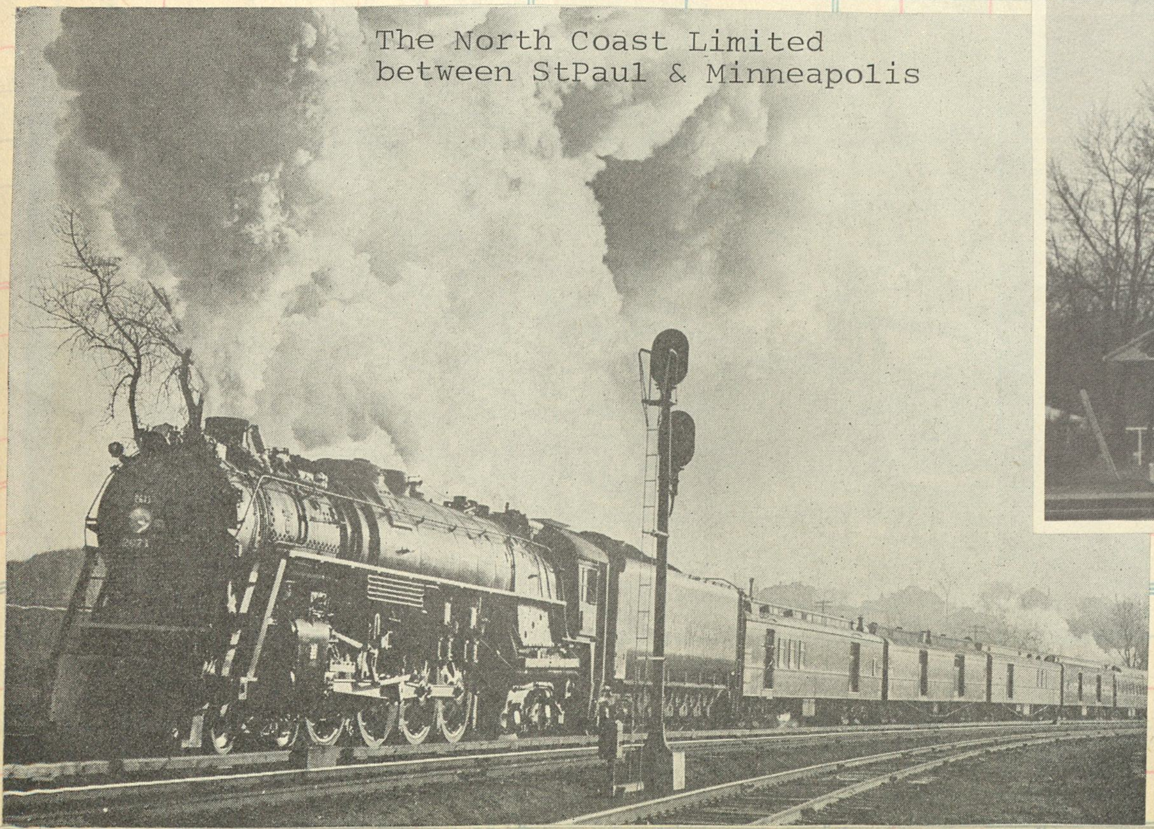
**Lunch Car**—Serving light short order food and refreshments, Winnipeg to Manitoba Jct.

**Cafe-Coach—Air-Conditioned:—**
Manitoba Junction to St. Paul.

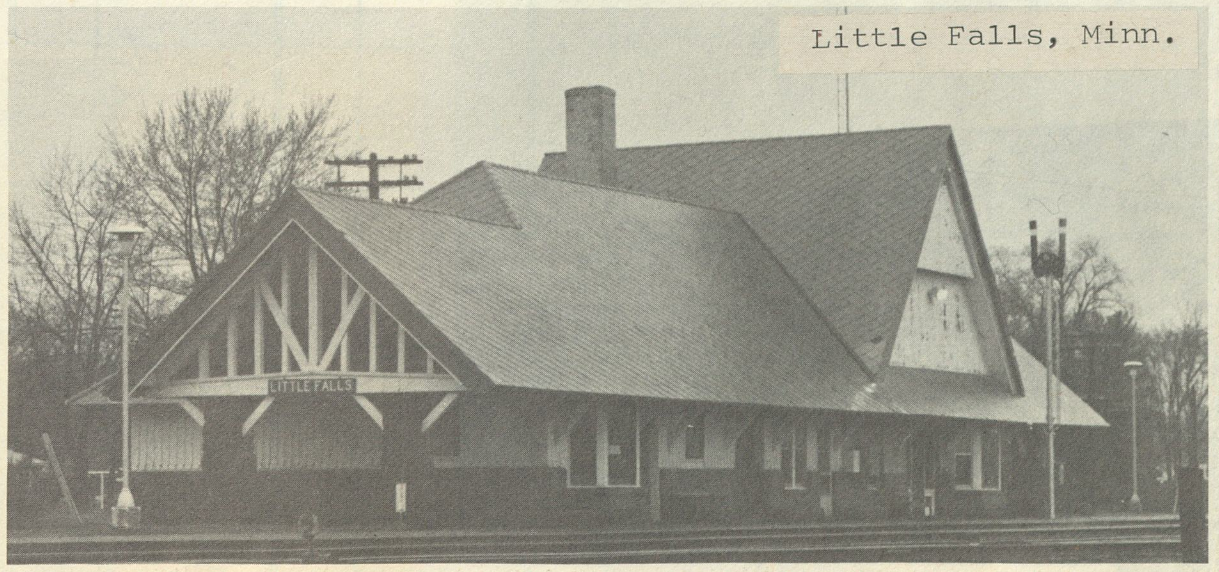


The 2189 leads Trn #14 away from Winnipeg on its 480 mile all day run to the Twin Cities

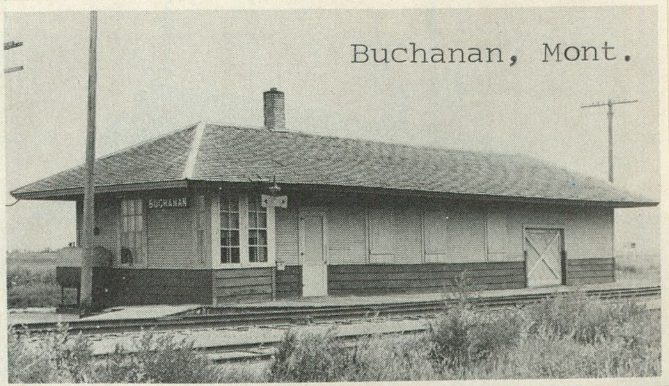
The North Coast Limited between StPaul & Minneapolis

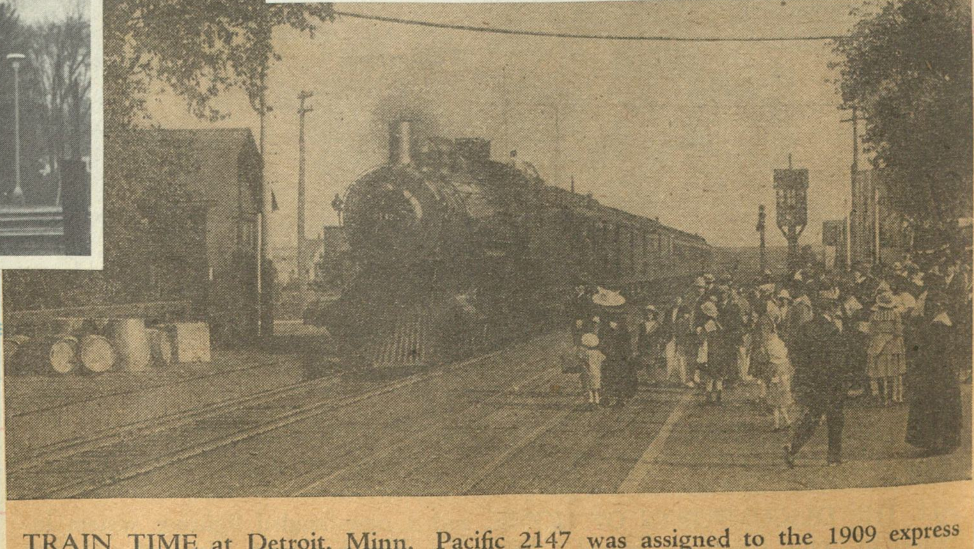


Little Falls, Minn.



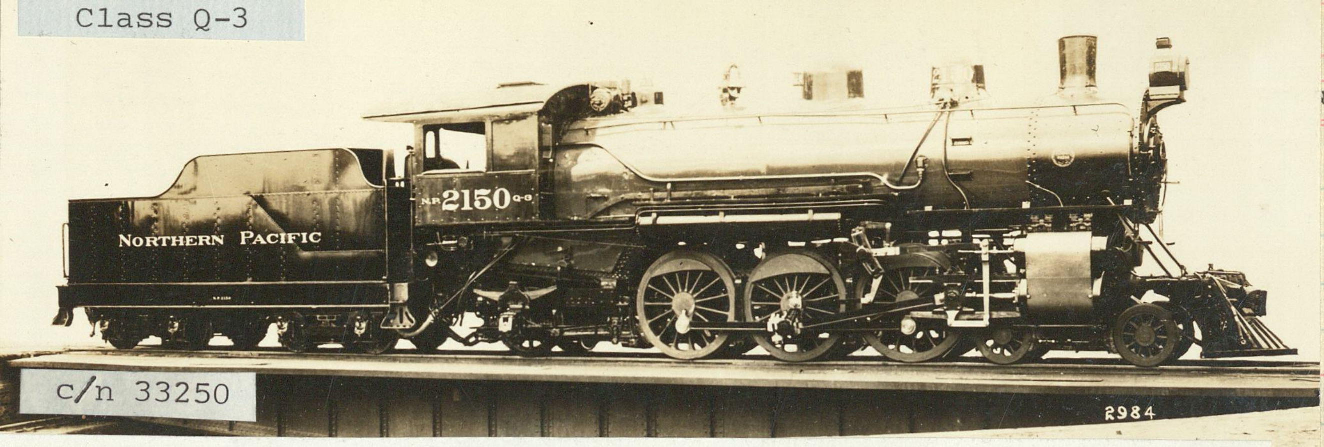
Buchanan, Mont.



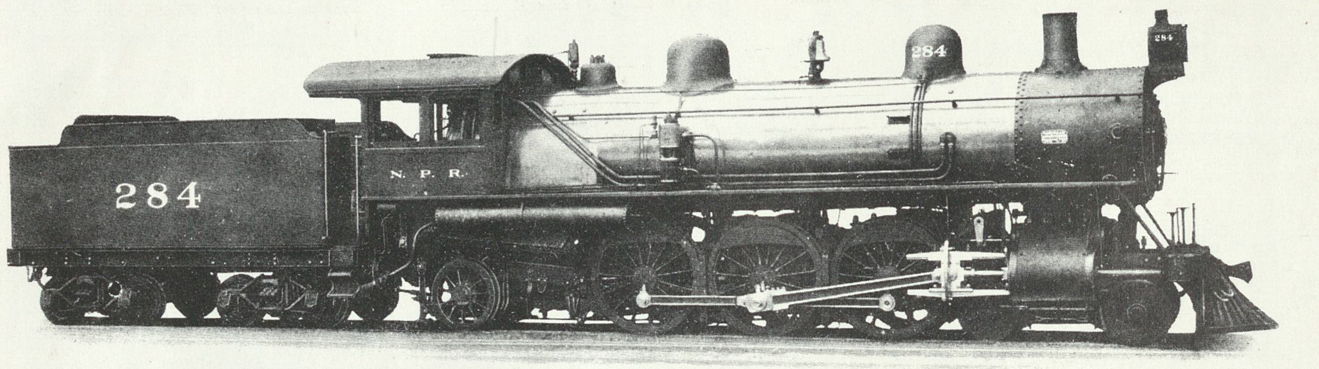


TRAIN TIME at Detroit, Minn. Pacific 2147 was assigned to the 1909 express

2148 - 2170
Baldwin 1909
Class Q-3


NORTHERN PACIFIC
2150
2984

c/n 33250



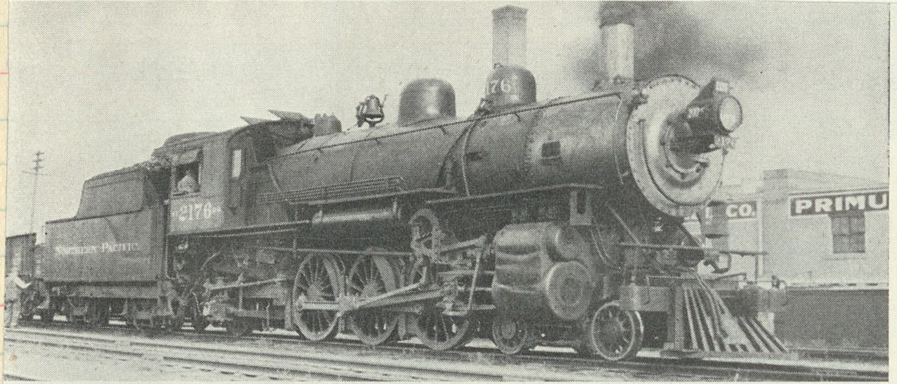
Initial engines of this type for the N.P.

Schenectady 1903
c/n 27321

PACIFIC TYPE PASSENGER LOCOMOTIVE

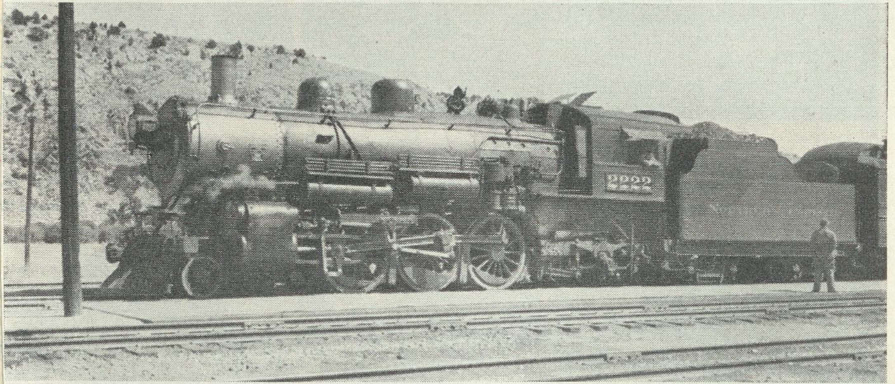
*Built for the Northern Pacific Railway*

280-299
renoed 2080-2099



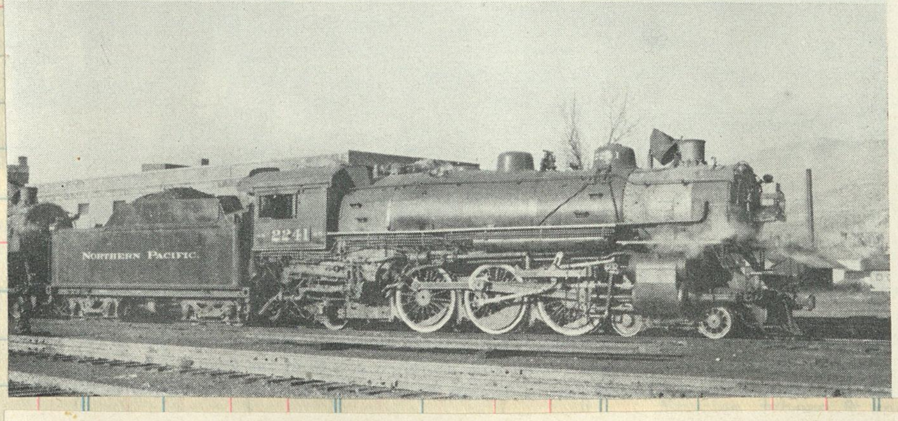
## Class Q-2 Pacific

After the original Q class, NP bought 49 Q-1's from Schenectady (only five remain) and then went experimenting with the Q-2. No. 2176, which was one of only two engines in the class, is shown in Jamestown, N. Dak., in 1932. These two Pacifics were built by American in 1906 as Cole compounds. They were rebuilt to simples after a short time, are now scrapped.



## Class Q-4 Pacific

The Pacifics of the Northern Pacific continued to grow in size. No. 2222, now assigned to the Spokane-Lewiston run, is typical of 50 Q-4's delivered by Baldwin and Schenectady in 1910. Only 31 remain in service. In contrast, 21 out of 23 Q-3's, their immediate forerunners, are still doing active service for the road. No. 2222 now has steel pilot, same thin-boiler look.

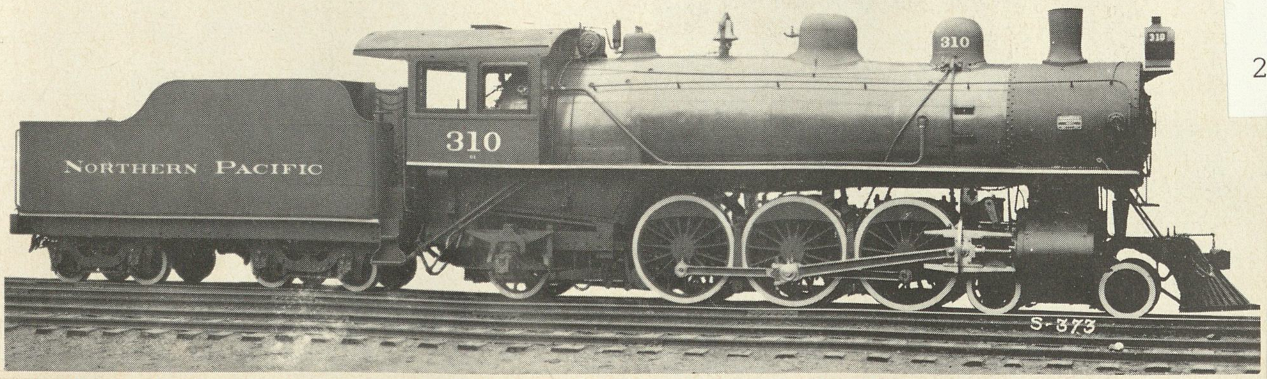

2241
NORTHERN PACIFIC

## Class Q-5 Pacific

Piston rod extensions and a smoke bonnet for western service feature the tailored appearance of this Q-5, No. 2241, standing at the Missoula (Mont.) engine terminal. NP purchased 20 of these Pacifics in 1920, and 19 still remain in service; No. 2229 was scrapped at Livingston in 1948. Distinctive headlight styling is the easiest possible identification of NP power.

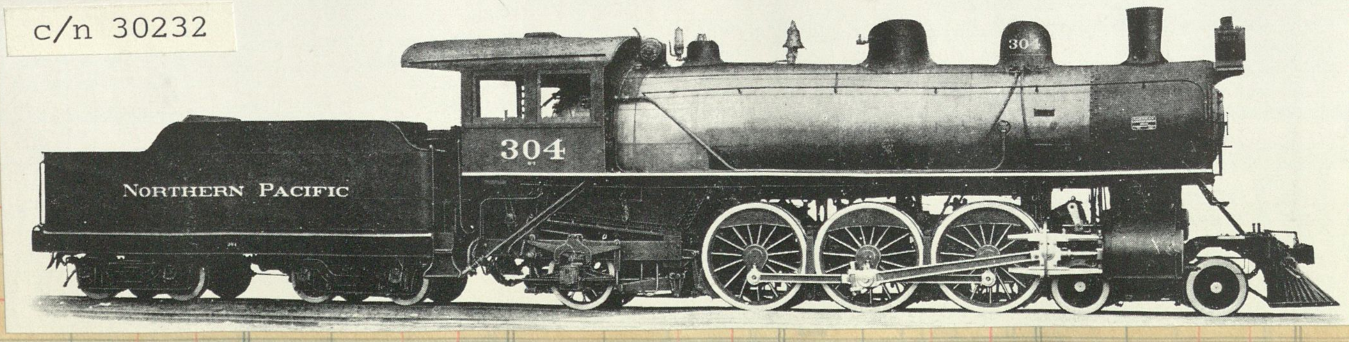
306-317 class Q-1 C/n 31077 Schenectady 1905

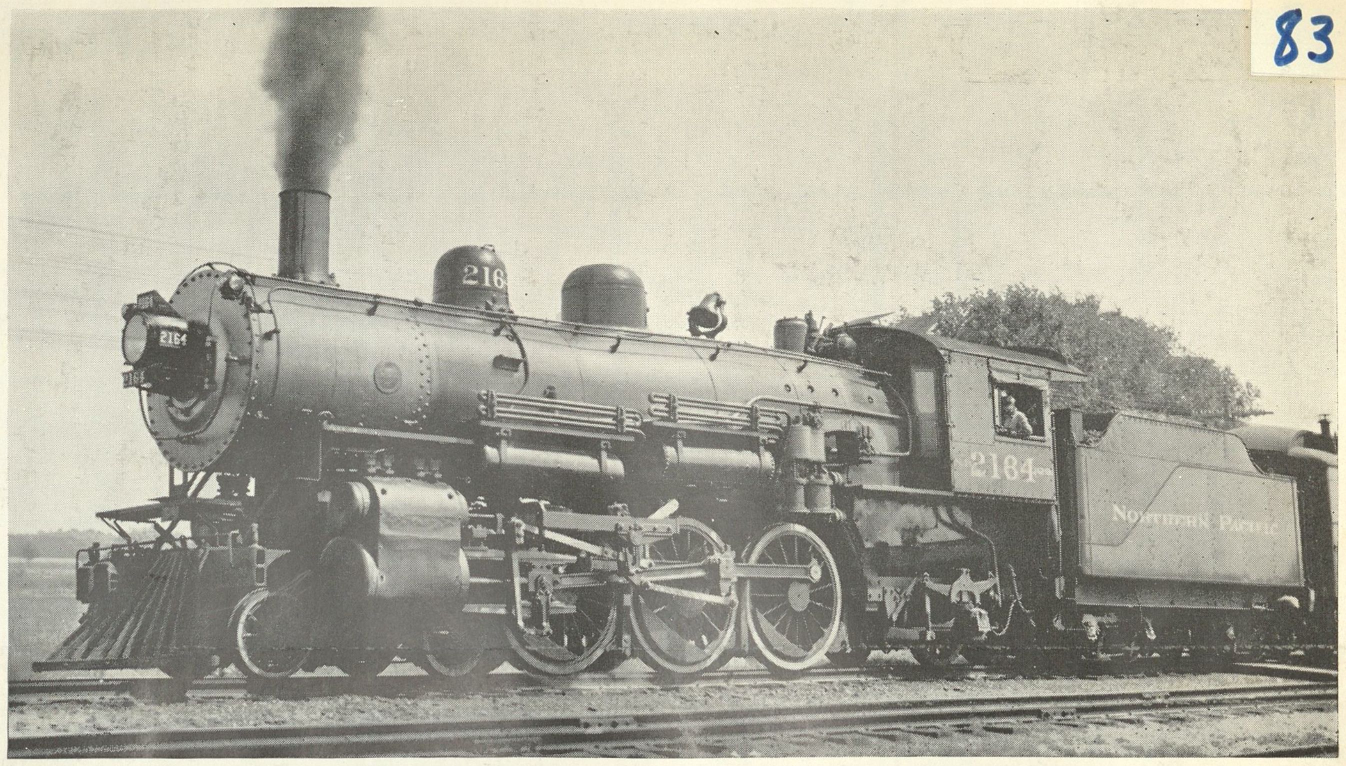
Renoed
2106-2117


NORTHERN PACIFIC
310
S-373

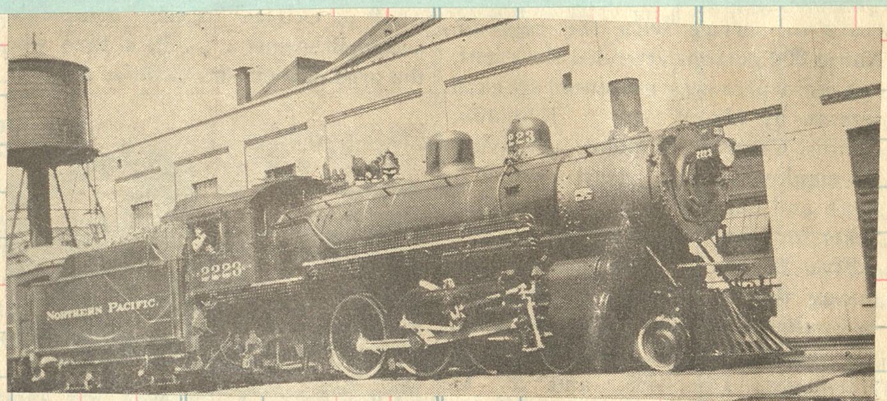
c/n 30232

300 - 305
Schen 1904
Class Q-1
Renoed
2100-2105

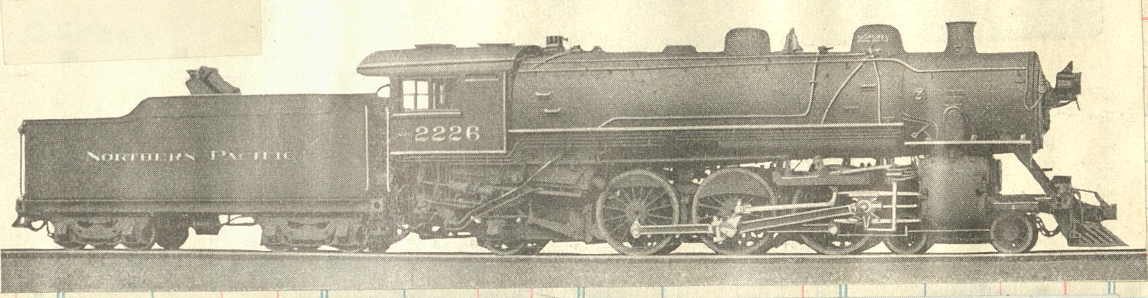

NORTHERN PACIFIC
304


2164
NORTHERN PACIFIC

The off center position of the large Sunbeam headlights gave the N.P. power a massive, aggressive appearence. Witness Pacific 2164, a 1909 product of Baldwin, daring anyone to challenge her authority.

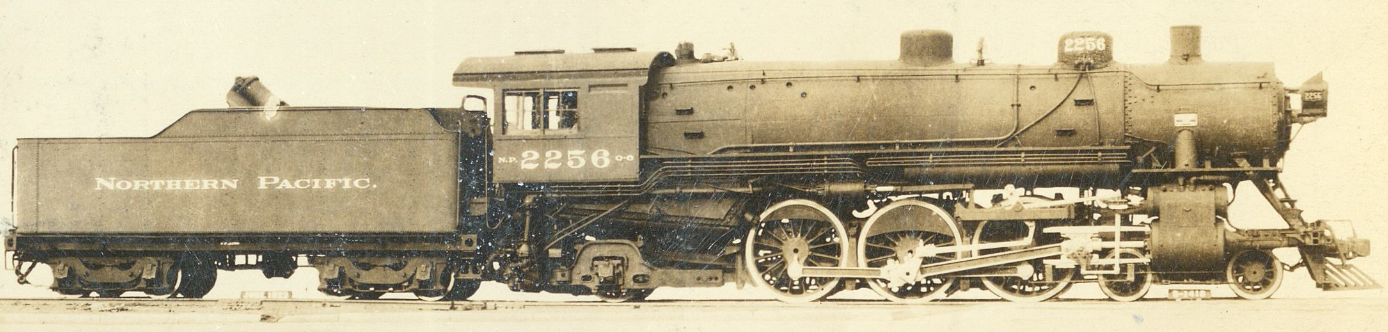

2223
NORTHERN PACIFIC

2208-2225 c/n 48201 Schenectady 1910

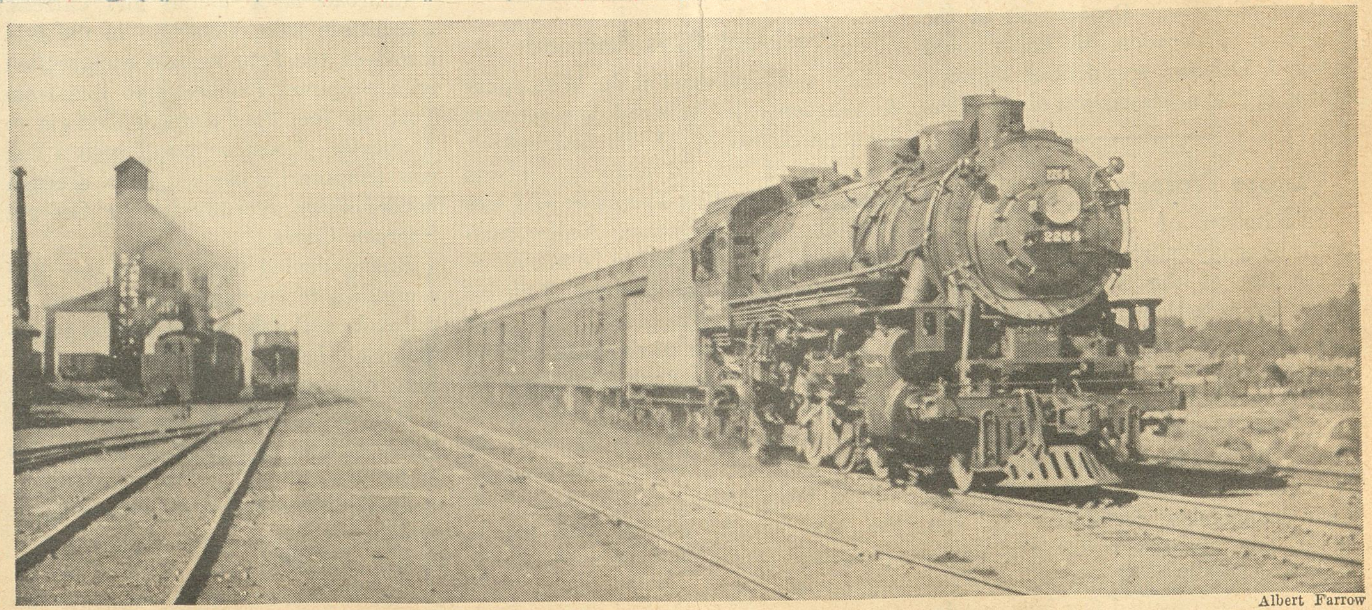

NORTHERN PACIFIC
2226

2226-2245 c/n 62422 Brooks 1920

The last Pacifics for the N.P.

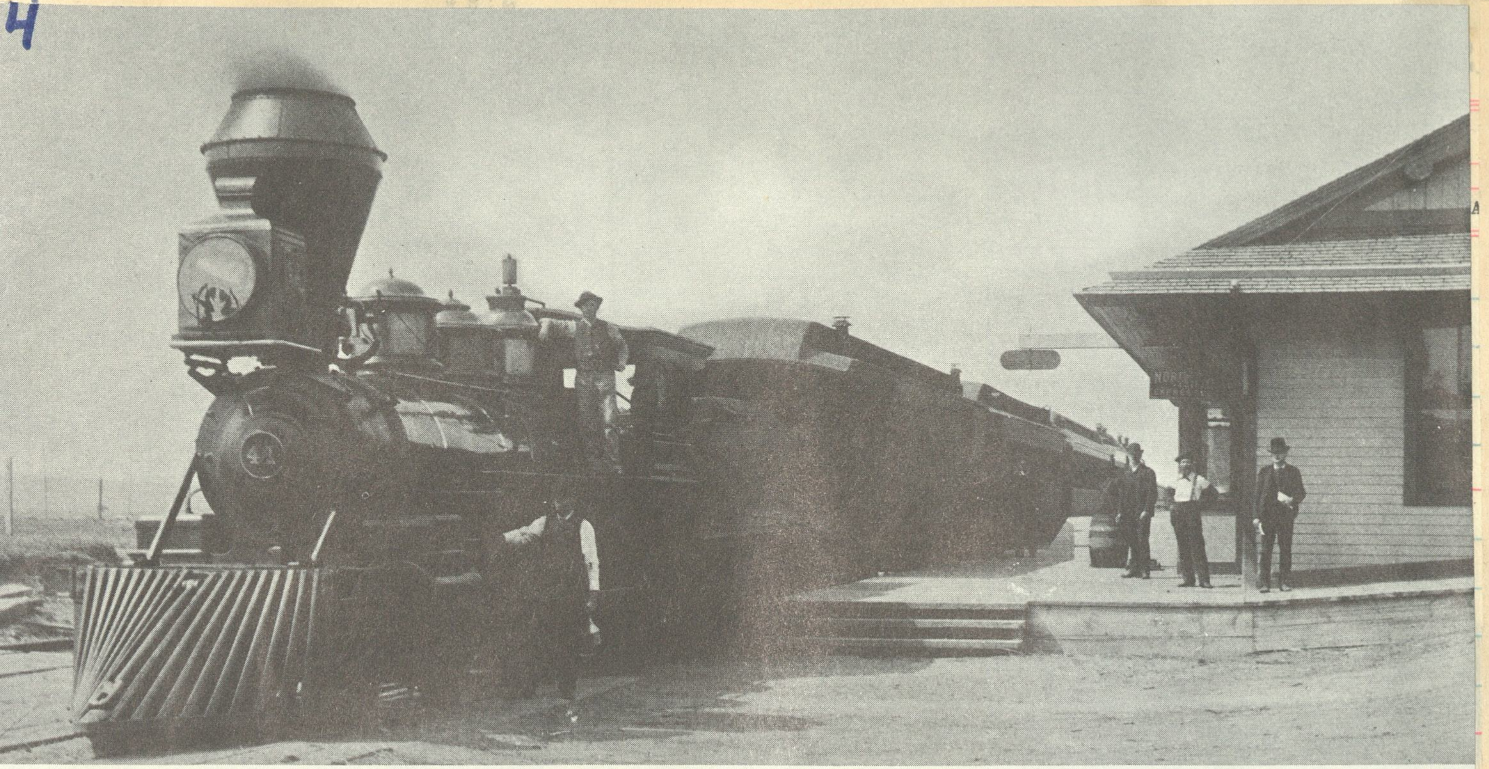

NORTHERN PACIFIC
2256

2246-2265 c/n 64338 Schenectady 1923



Albert Farrow

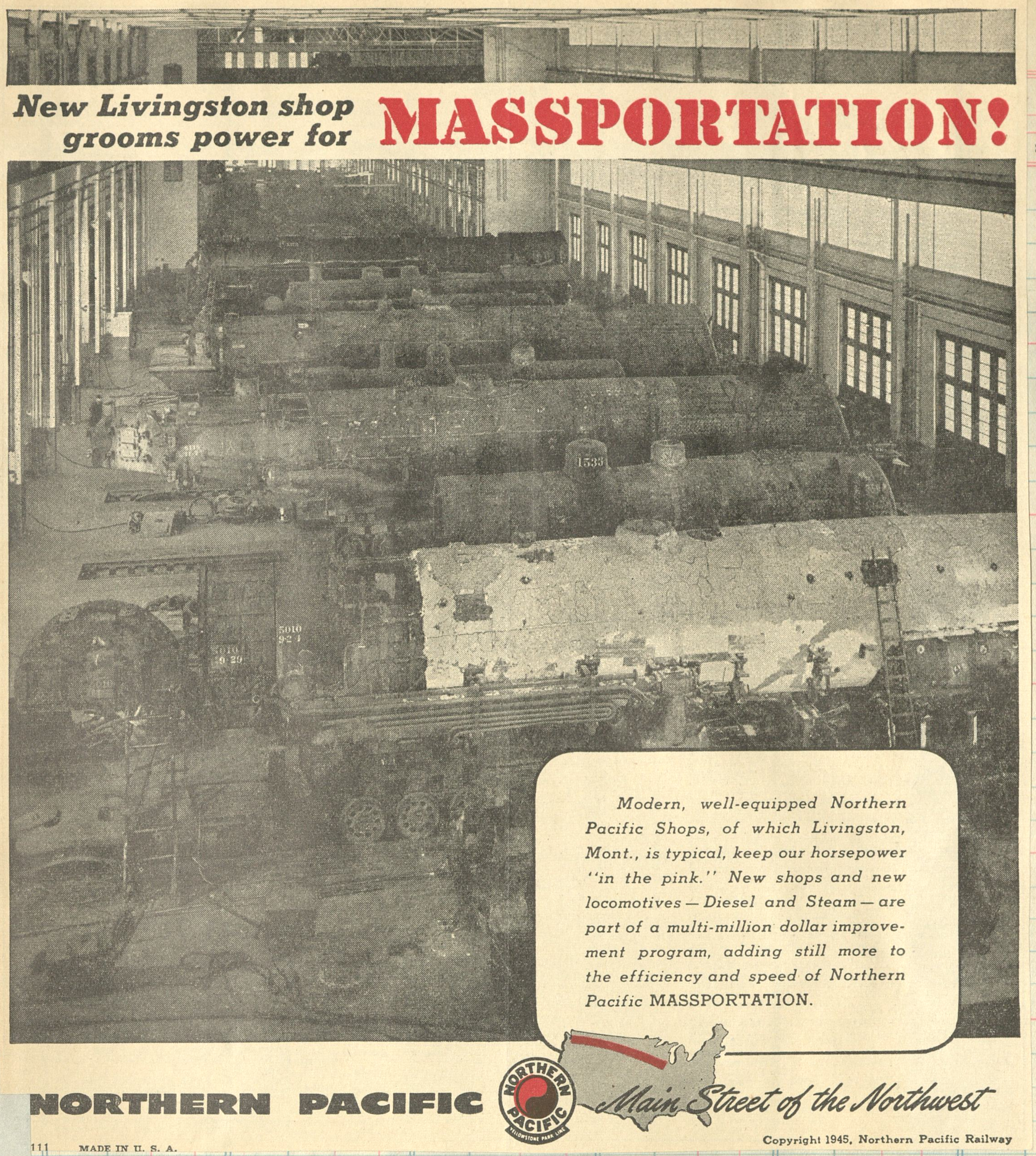
NORTHERN PACIFIC LOCOMOTIVE 2264 PULLING TRAIN 4 OUT OF YAKIMA, WASH.



NNEWAUKAN, NORTH DAKOTA (1885) Northern Pacific

This was the first train into Minnewaukan on August 10, 1885, on the branch from Jamestown to Leeds. The station sign reads "Northern Pacific Express ."

Baldwin 1872
c/n 2689



## New Livingston shop grooms power for MASSPORTATION!

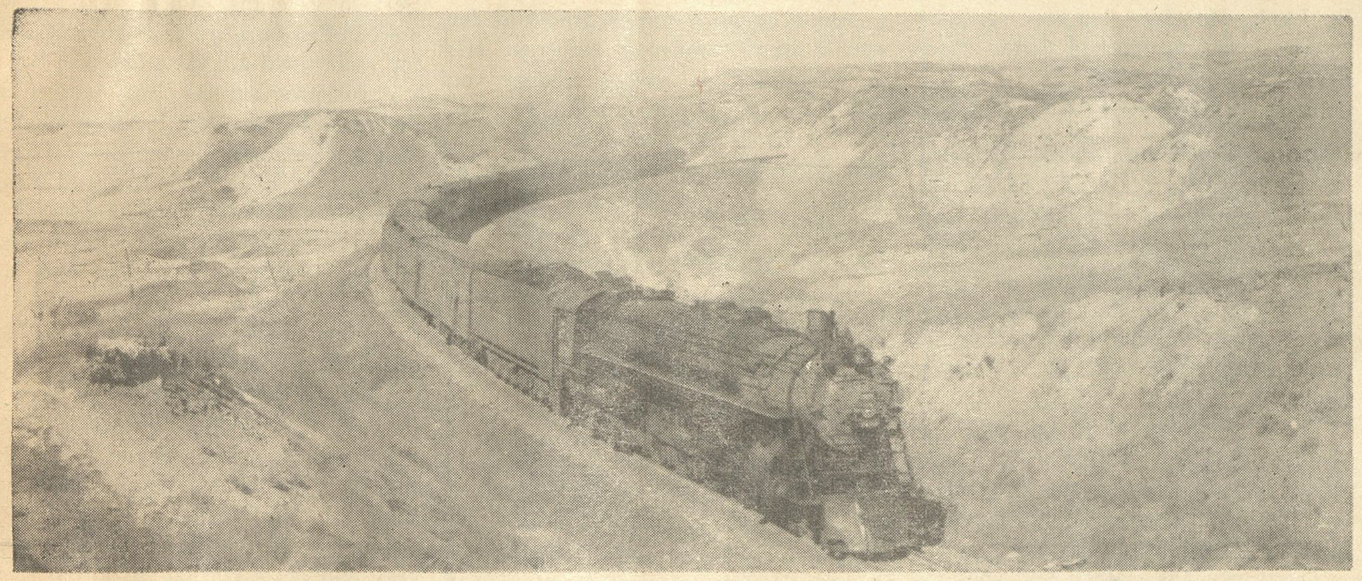
Modern, well-equipped Northern Pacific Shops, of which Livingston, Mont., is typical, keep our horsepower "in the pink." New shops and new locomotives—Diesel and Steam—are part of a multi-million dollar improvement program, adding still more to the efficiency and speed of Northern Pacific MASSPORTATION.

NORTHERN PACIFIC *Main Street of the Northwest*

111 MADE IN U. S. A.

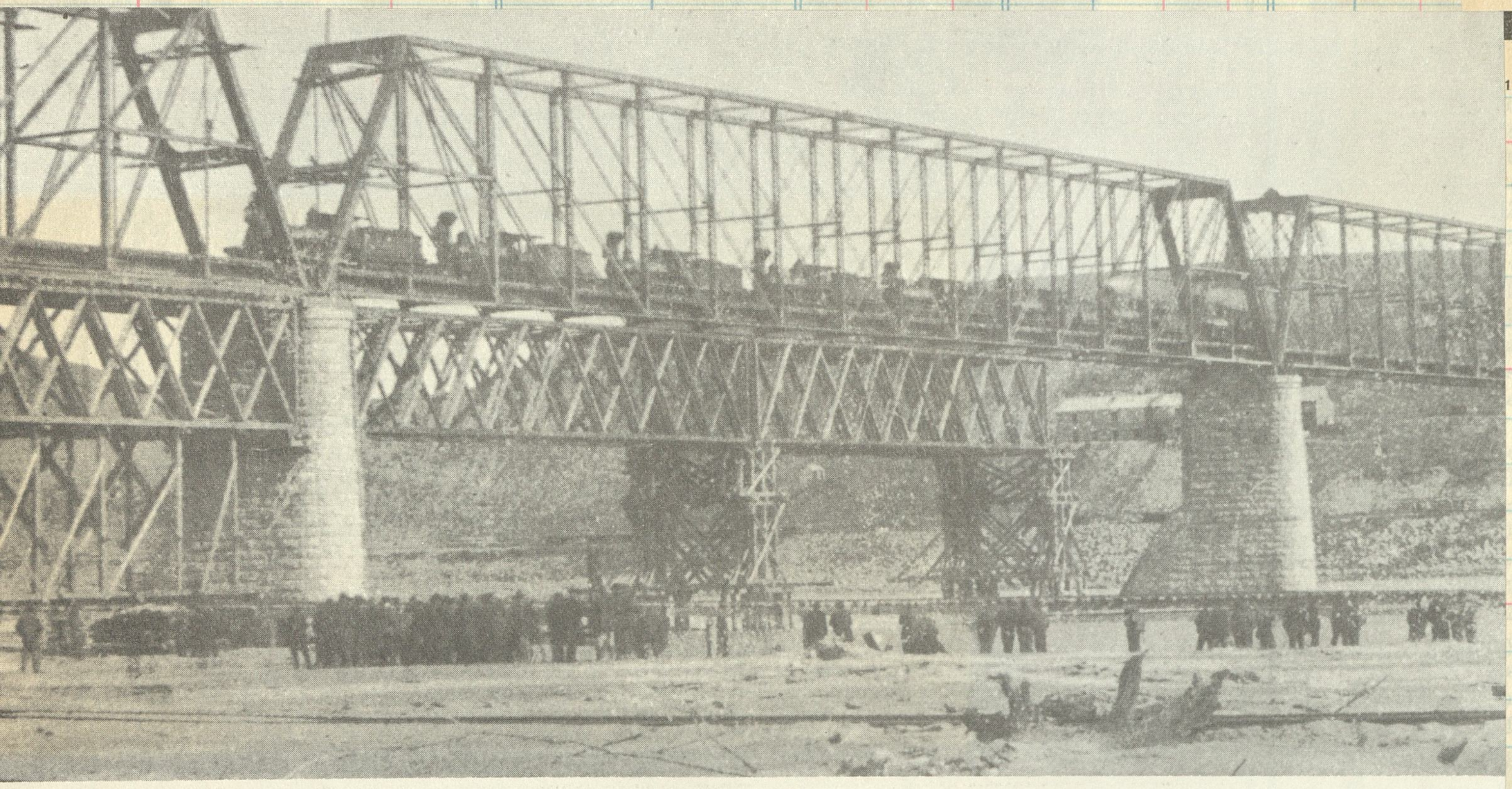
Copyright 1945, Northern Pacific Railway

Sold Amount

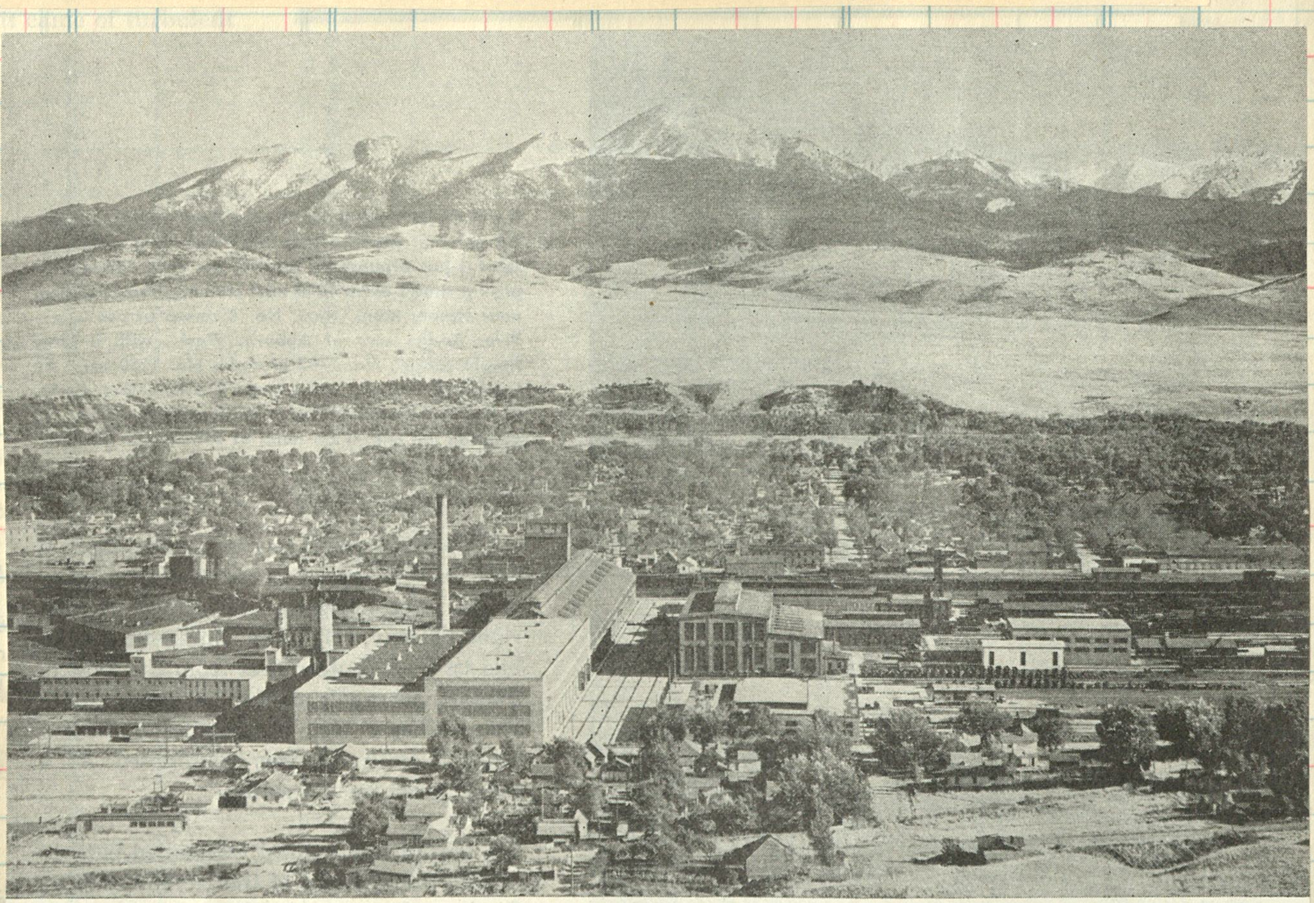


W. R. McGee

NORTHERN PACIFIC'S ENGINE 2670 NEAR SULLY SPRINGS, N.D.

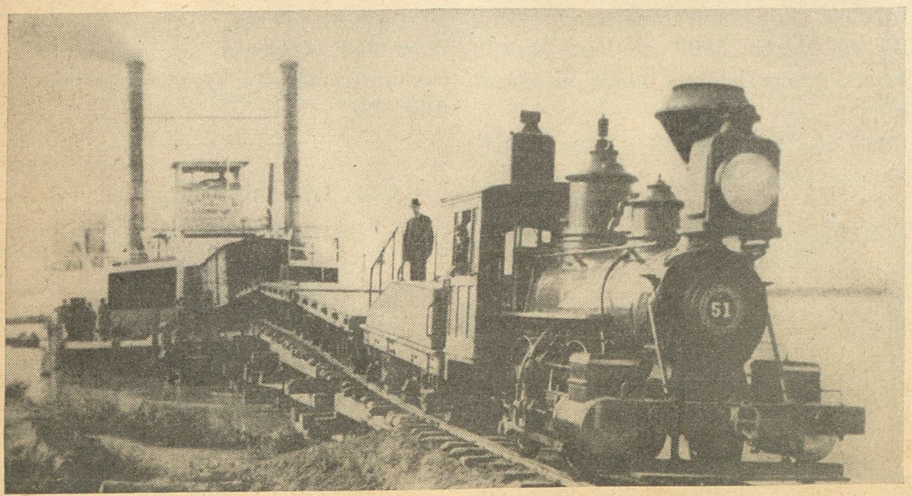


**WILL IT HOLD?** A crowd of interested spectators gaze in wonder as the Northern Pacific Railroad tests the big bridge across the Missouri River near Mandan, North Dakota, in 1880. Eight diamond-stacked 4-4-0 type locomotives were coupled up and operated across the lengthy spans and adjoining trestle work to test the strength of the structures. This bridge on the main line of the northern transcontinental route ended the Northern Pacific's summer train ferry and winter "ice bridge" across the waters of the Big Muddy. The towering stone piers supported the metal truss spans, the wooden falsework visible here under the spans being removed as soon as the work was completed. Although the bridge was designed by competent and skilled artisans, one cannot but wonder at the thoughts of the enginemen in charge of this battery of motive power as they chuffed out onto the structure for the trial trip across it. The gifted railroad author, Frank H. Spearman, in his book, "The Strategy of Great Railroads," remarked, "Western railroad men are in themselves a tower of strength. They stand for decision, action, and organization. They are indefatigable, constructive, and, above all, resourceful . . ." Spearman's statements hold true to this day, but incidents such as this bridge trial at the risk of life and limb are, happily, no longer a common occurrence. (Courtesy of Ronald V. Nixon)

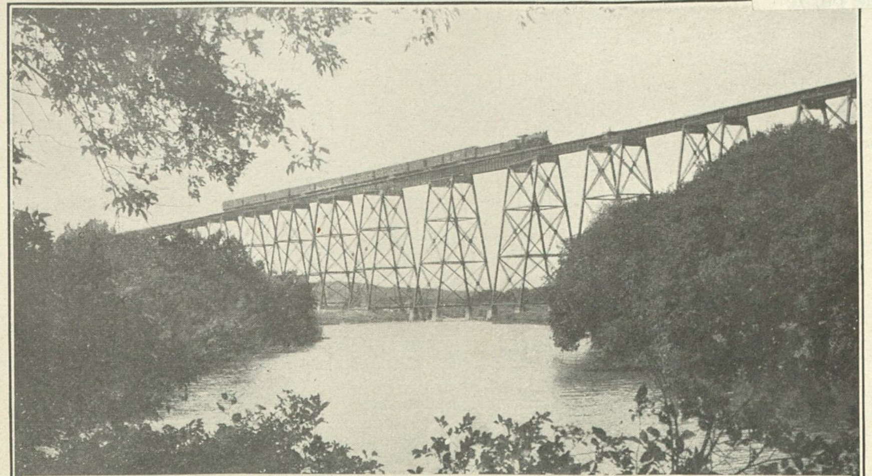


Harold McGee, courtesy Northern Pacific.

**Northern Pacific shops at Livingston, Mont., stand against the background of Mt. Livingston and Absaroka Range. The large steam locomotive maintenance shop is one of five buildings completed here in 1944. A line to Yellowstone branches here.**

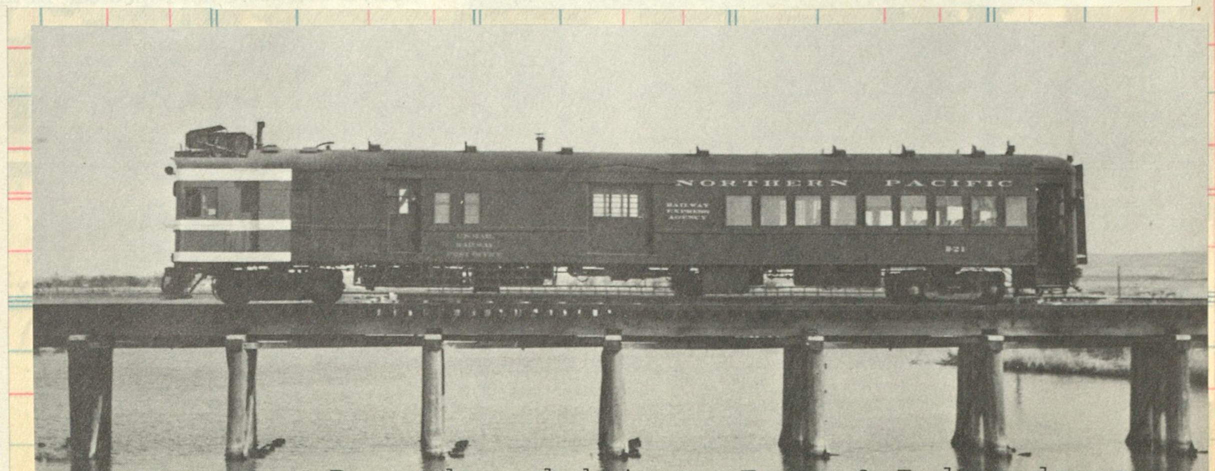


NORTHERN PACIFIC SWITCH ENGINE 51 LOADING CARS ON FERRY BOAT IN 1881 AT BISMARCK, N. D.

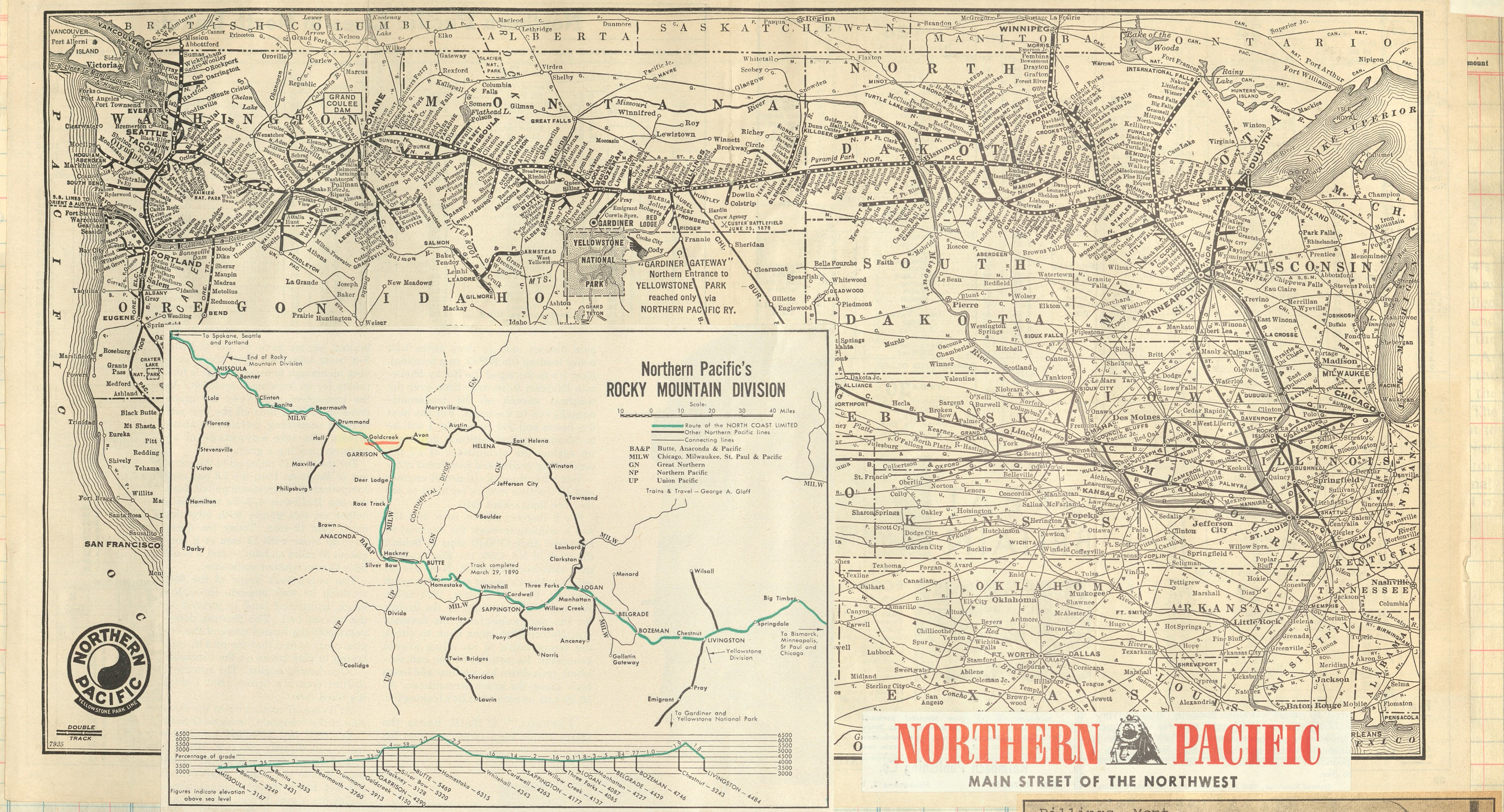


*B.* THE "HIGH LINE" ACROSS THE VALLEY OF SHEYENNE RIVER, N. DAK.

Height of trestle (150 feet) indicates depth of valley. Photograph by Johnson & Olson, Alexandria, Minn.

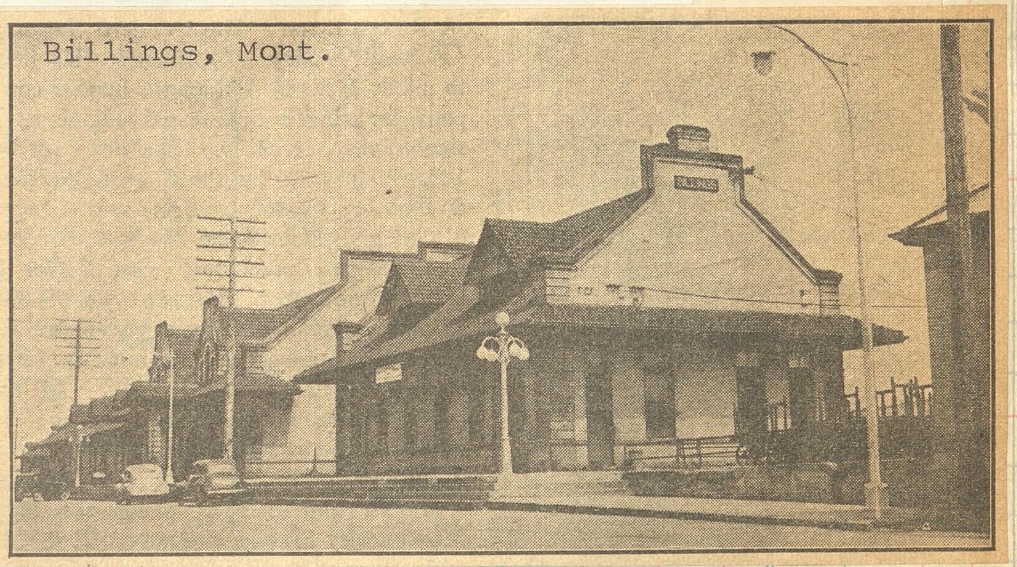


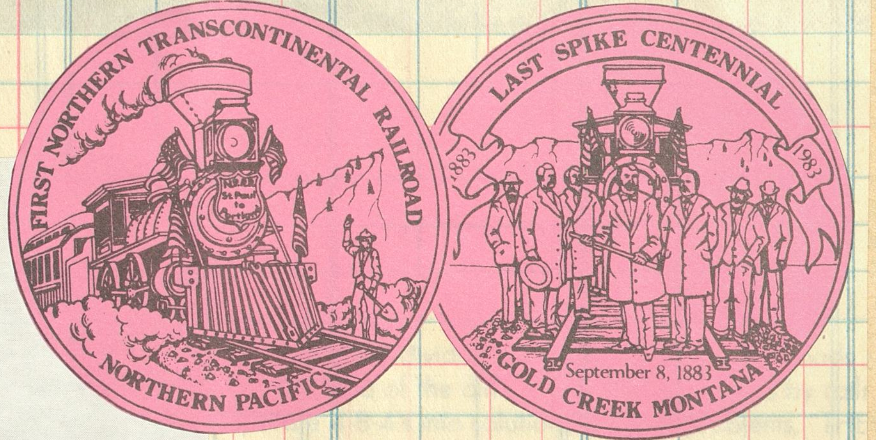
Verona, N.D. on branch between Fargo & Independence

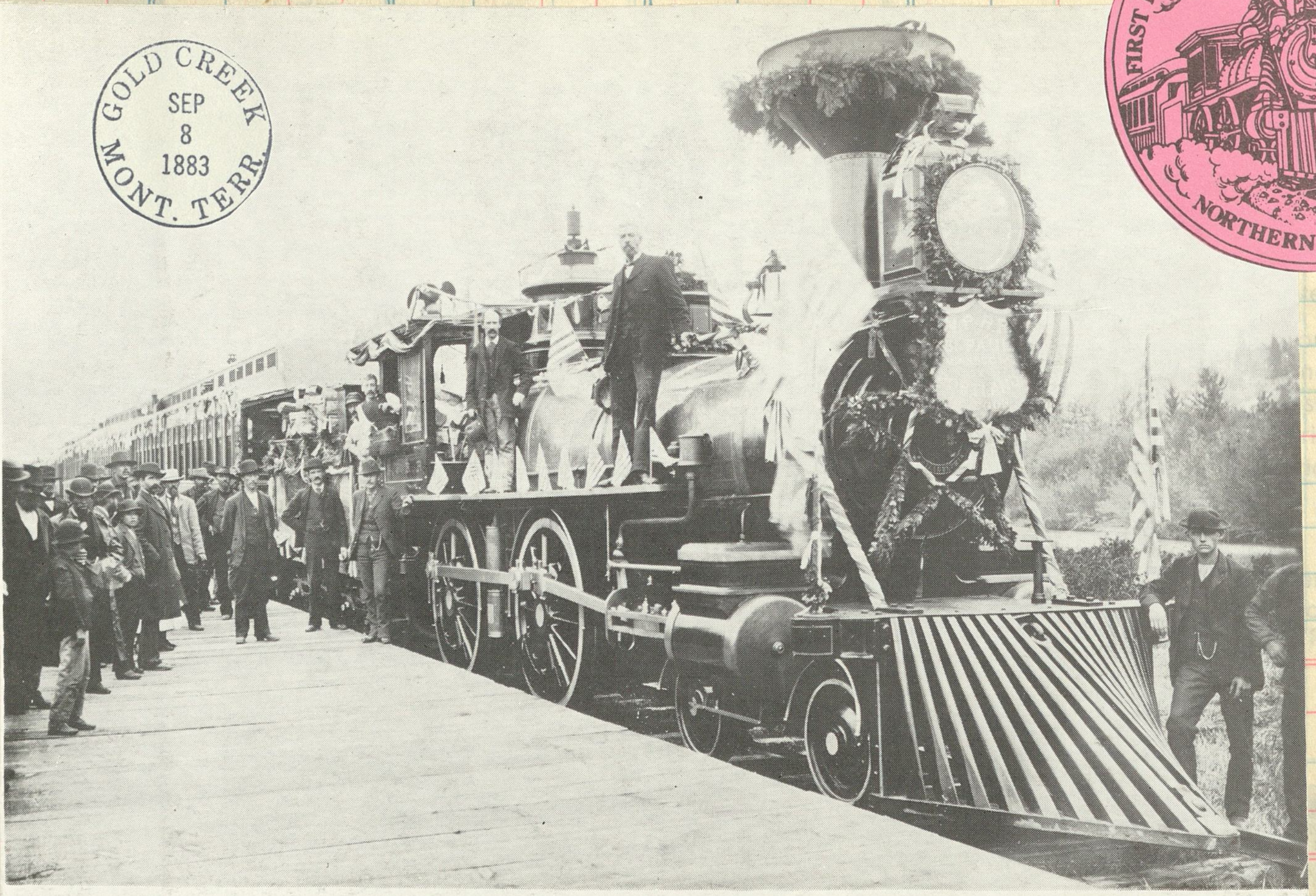

BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
WASHINGTON
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
IDAHO
OREGON
MINNESOTA
WISCONSIN
IOWA
NEBRASKA
KANSAS
MISSOURI
ILLINOIS
OKLAHOMA
ARKANSAS
TEXAS
MICH.
KENTUCKY
TENNESSEE
PACIFIC OCEAN
LAKE SUPERIOR
GRAND COULEE DAM
VANCOUVER
Victoria
SEATTLE
TACOMA
PORTLAND
SPOKANE
MISSOULA
HELENA
BUTTE
BILLINGS
BISMARCK
FARGO
WINNIPEG
DULUTH
SUPERIOR
MINNEAPOLIS
St. Paul
CHICAGO
MILWAUKEE
Kansas City
ST. LOUIS
Omaha
Des Moines
Lincoln
Oklahoma
DALLAS
FT. WORTH
Little Rock
Memphis
Jackson
Baton Rouge
NEW ORLEANS
SAN FRANCISCO
EUGENE
GARDINER
YELLOWSTONE NATIONAL PARK
CUSTER BATTLEFIELD JUNE 25, 1876
"GARDINER GATEWAY" Northern Entrance to YELLOWSTONE PARK reached only via NORTHERN PACIFIC RY.
NORTHERN PACIFIC
YELLOWSTONE PARK LINE
DOUBLE TRACK
7935
To Spokane, Seattle and Portland
End of Rocky Mountain Division
Northern Pacific's
ROCKY MOUNTAIN DIVISION
Scale:
10 0 10 20 30 40 Miles
Route of the NORTH COAST LIMITED
Other Northern Pacific lines
Connecting lines
BA&P Butte, Anaconda & Pacific
MILW Chicago, Milwaukee, St. Paul & Pacific
GN Great Northern
NP Northern Pacific
UP Union Pacific
Trains & Travel — George A. Gloff
MISSOULA
Bonner
Clinton
Bonita
Bearmouth
MILW
Drummond
Hall
Goldcreek
Avon
GARRISON
Maxville
Philipsburg
Lolo
Florence
Stevensville
Victor
Hamilton
Darby
Marysville
Austin
HELENA
East Helena
Winston
Jefferson City
Townsend
Deer Lodge
Race Track
CONTINENTAL DIVIDE
Boulder
Brown
ANACONDA
BA&P
Hackney
Silver Bow
BUTTE
Track completed March 29, 1890
Homestake
Whitehall
Cardwell
Three Forks
LOGAN
Manhattan
Willow Creek
SAPPINGTON
Lombard
Clarkston
Menard
Wilsall
Big Timber
Divide
Waterloo
Harrison
Pony
Norris
Anceney
BELGRADE
BOZEMAN
Chestnut
LIVINGSTON
Springdale
To Bismarck, Minneapolis, St Paul and Chicago
Yellowstone Division
Gallatin Gateway
Coolidge
Twin Bridges
Sheridan
Laurin
Pray
Emigrant
To Gardiner and Yellowstone National Park
GN
UP
6500
6000
5500
5000
4500
4000
3500
3000
Percentage of grade
.3 .4 .35 .3 .3 .4 .35 .6 .4 .58 2.2 2.2 .16 .14 .2 .16 0.1 1.8 .3 .5 .84 .77 1.0 1.9 1.8
MISSOULA – 3167
Bonner – 3249
Clinton – 3431
Bonita – 3553
Bearmouth – 3760
Drummond – 3913
Goldcreek – 4150
GARRISON – 4290
Hackney – 5128
Silver Bow – 5320
BUTTE – 5469
Homestake – 6315
Whitehall – 4343
Cardwell – 4263
SAPPINGTON – 4177
Willow Creek – 4137
Three Forks – 4065
LOGAN – 4087
Manhattan – 4227
BELGRADE – 4439
BOZEMAN – 4746
Chestnut – 5243
LIVINGSTON – 4484
Figures indicate elevation above sea level

**NORTHERN PACIFIC**

**MAIN STREET OF THE NORTHWEST**


Billings, Mont.


FIRST NORTHERN TRANSCONTINENTAL RAILROAD
NORTHERN PACIFIC
LAST SPIKE CENTENNIAL
1883
1983
September 8, 1883
GOLD CREEK MONTANA


GOLD CREEK
SEP
8
1883
MONT. TERR.

Courtesy Northern Pacific Ry.

The Villard "Gold Spike Special," one of four special trains which traveled over the Northern Pacific from St. Paul to Portland in 1883 on the occasion of the completion of the Northern Pacific Railway. The last spike was driven at Gold Creek, Montana on September 8, 1883 when lines from east and west met to complete the first of the Northern transcontinental railways. Many notables were present including 10 United States senators, 3 former senators, 26 congressmen, 2 former congressmen, 9 governors, 4 ex-governors, 9 army generals, many leading railroad executives, judges and mayors and a large party of foreign dignitaries. 50 journalists from America's leading newspapers covered the story. Following the ceremonies at Gold Creek, the special train proceeded on to Portland.

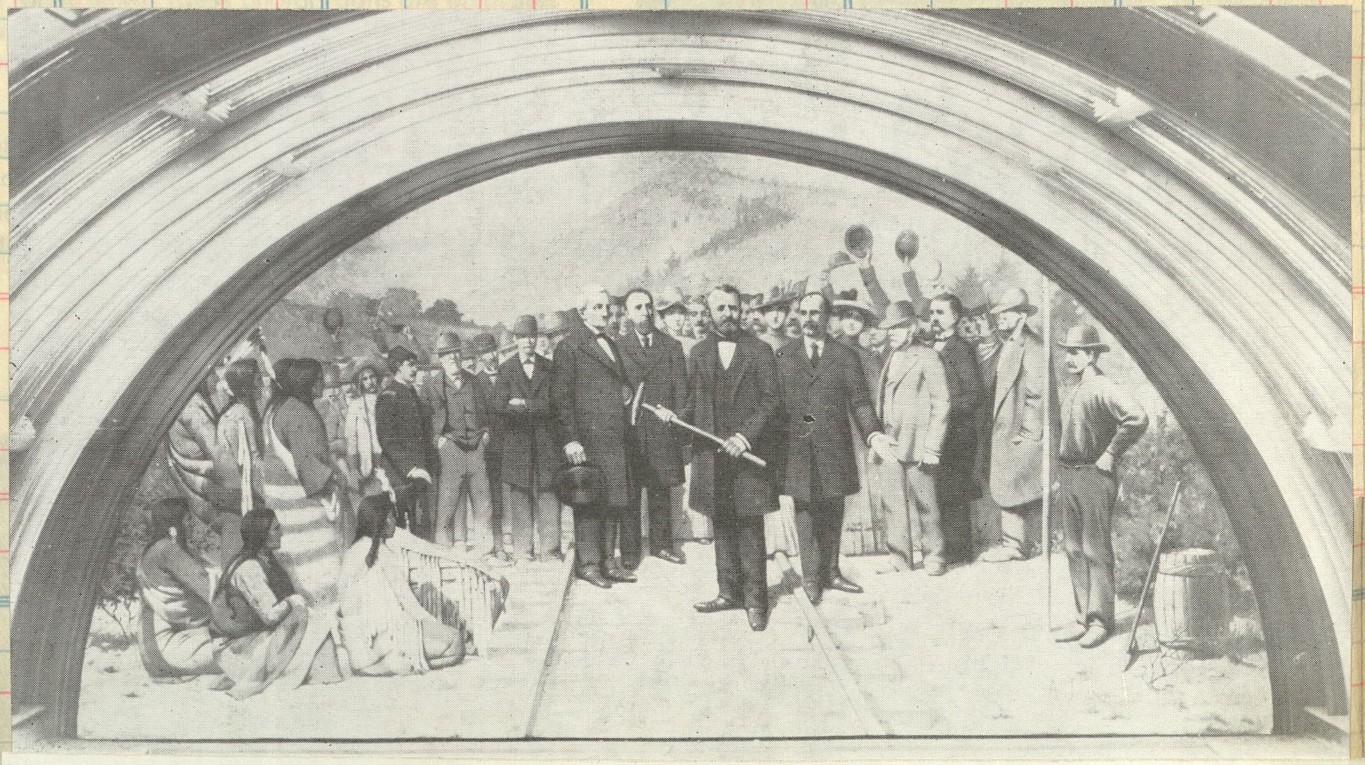
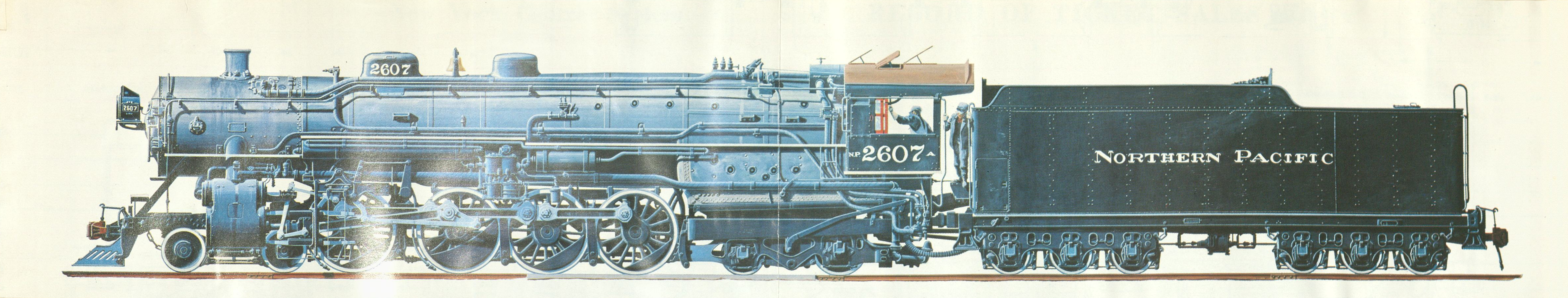


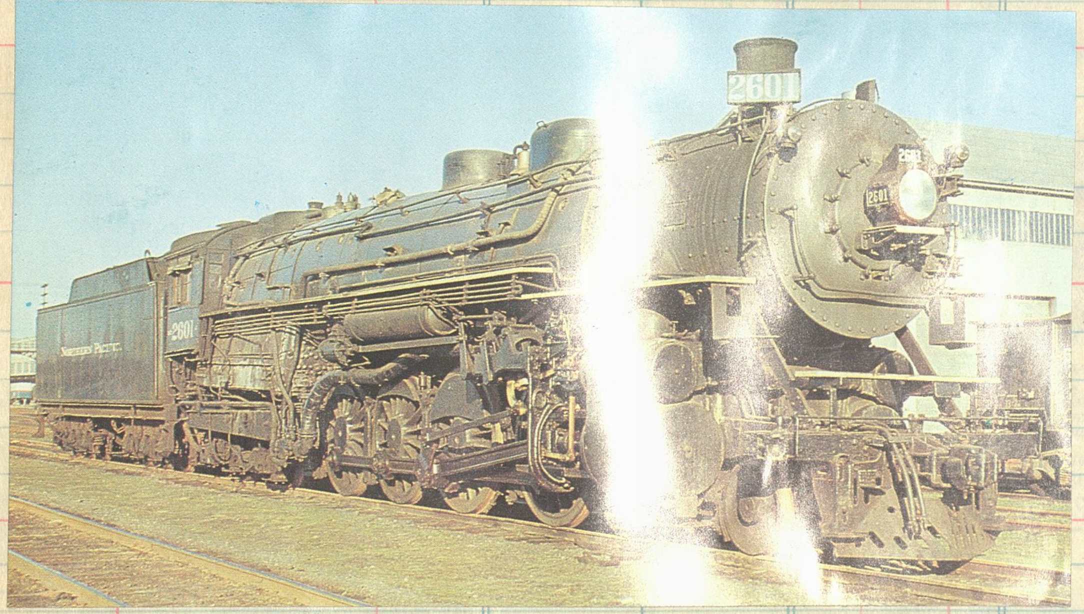
Photo of mural painting in Montana state Capitol at Helena depicting driving of last spike completing Northern Pacific Railway at Gold Creek, Montana, September 8, 1883. General Grant is shown with spike maul and at his left is shown Henry Villard then President of the Northern Pacific. Note: Actually it was Villard who drove the "last spike," not Grant, as the mural would seem to indicate.

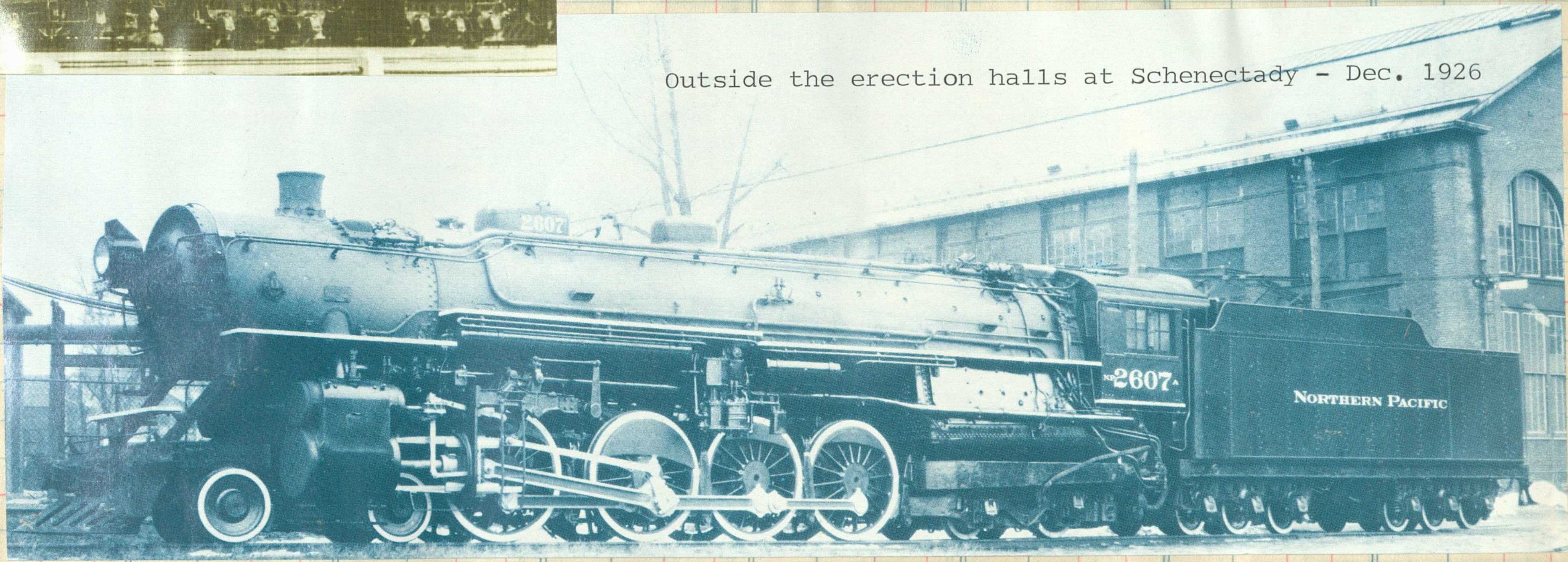

2607
NP 2607
NORTHERN PACIFIC

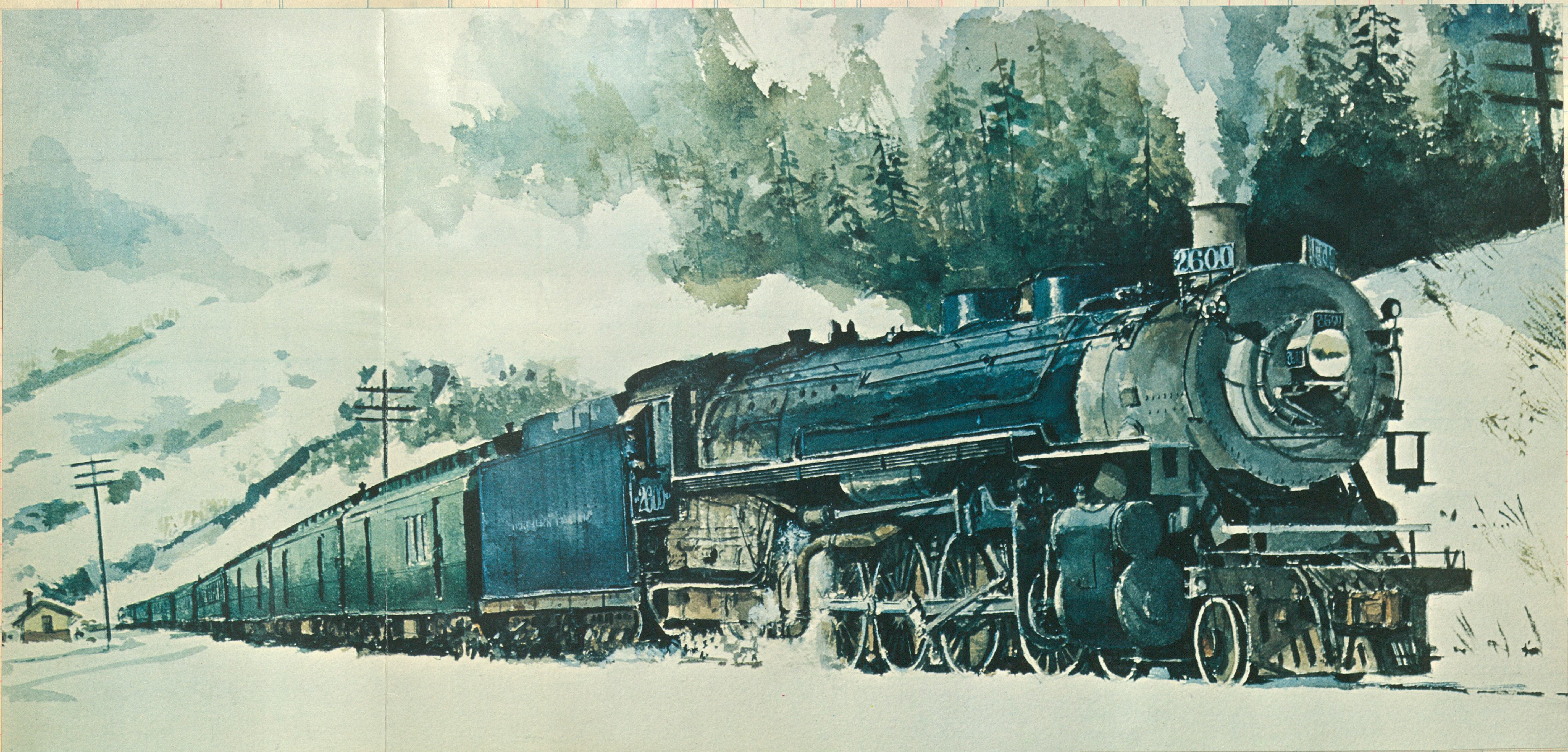
Ready to head the eastbound North Coast Limited...Livingston, Mont., Aug 1, 1932
2600
NORTHERN PACIFIC

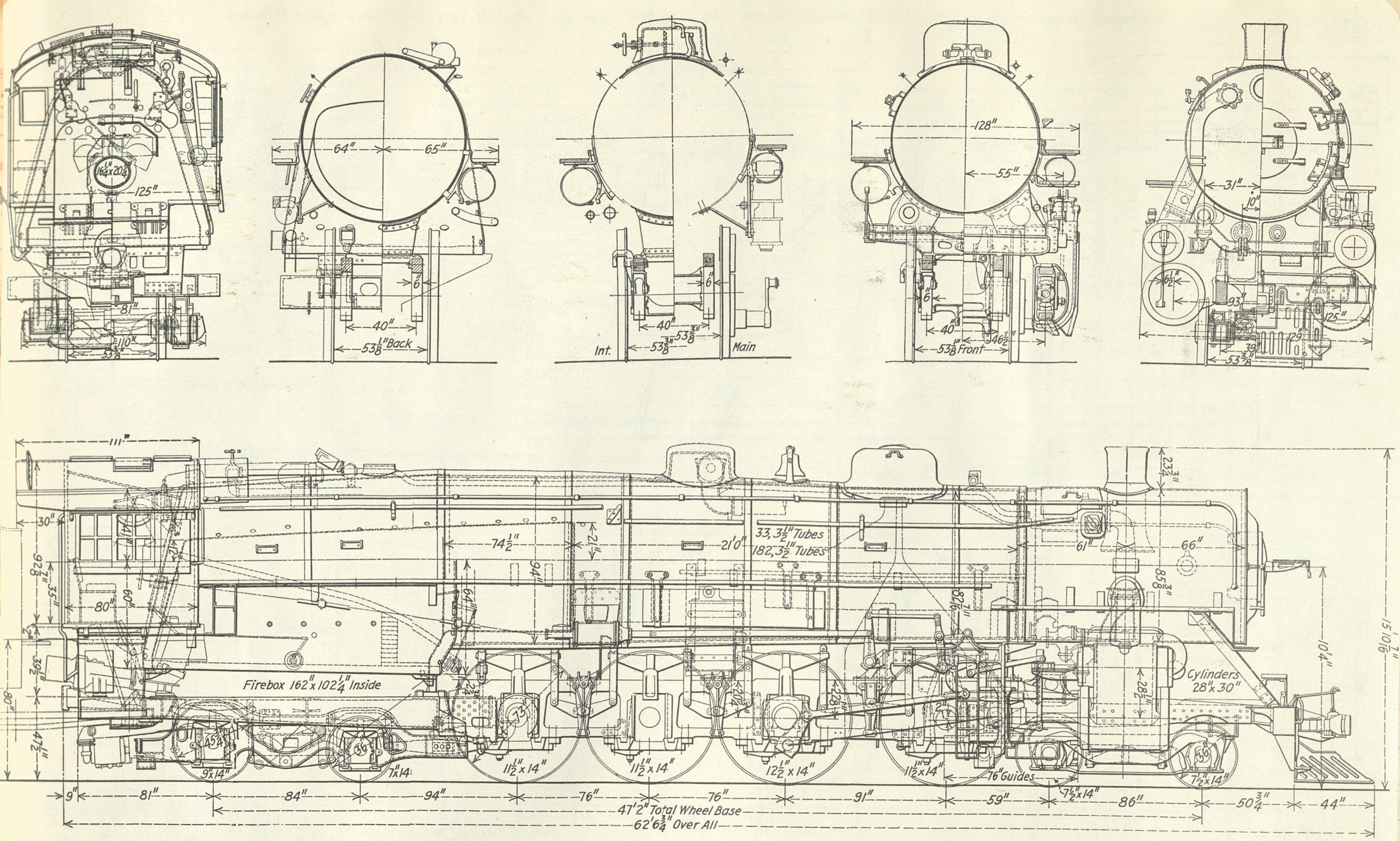
Northern (4-8-4) Type

| | | | |
|---|---|---|---|
| 2600-2611 | A | Schenectady | '26-'27 |
| 2626 | A-1 | Schenectady | Apr 1930 |
| 2650-2659 | A-2 | Baldwin | 1934-'35 |
| 2660-2667 | A-3 | Baldwin | 1938 |
| 2670-2677 | A-4 | Baldwin | 1941 |
| 2680-2689 | A-5 | Baldwin | 1943 |

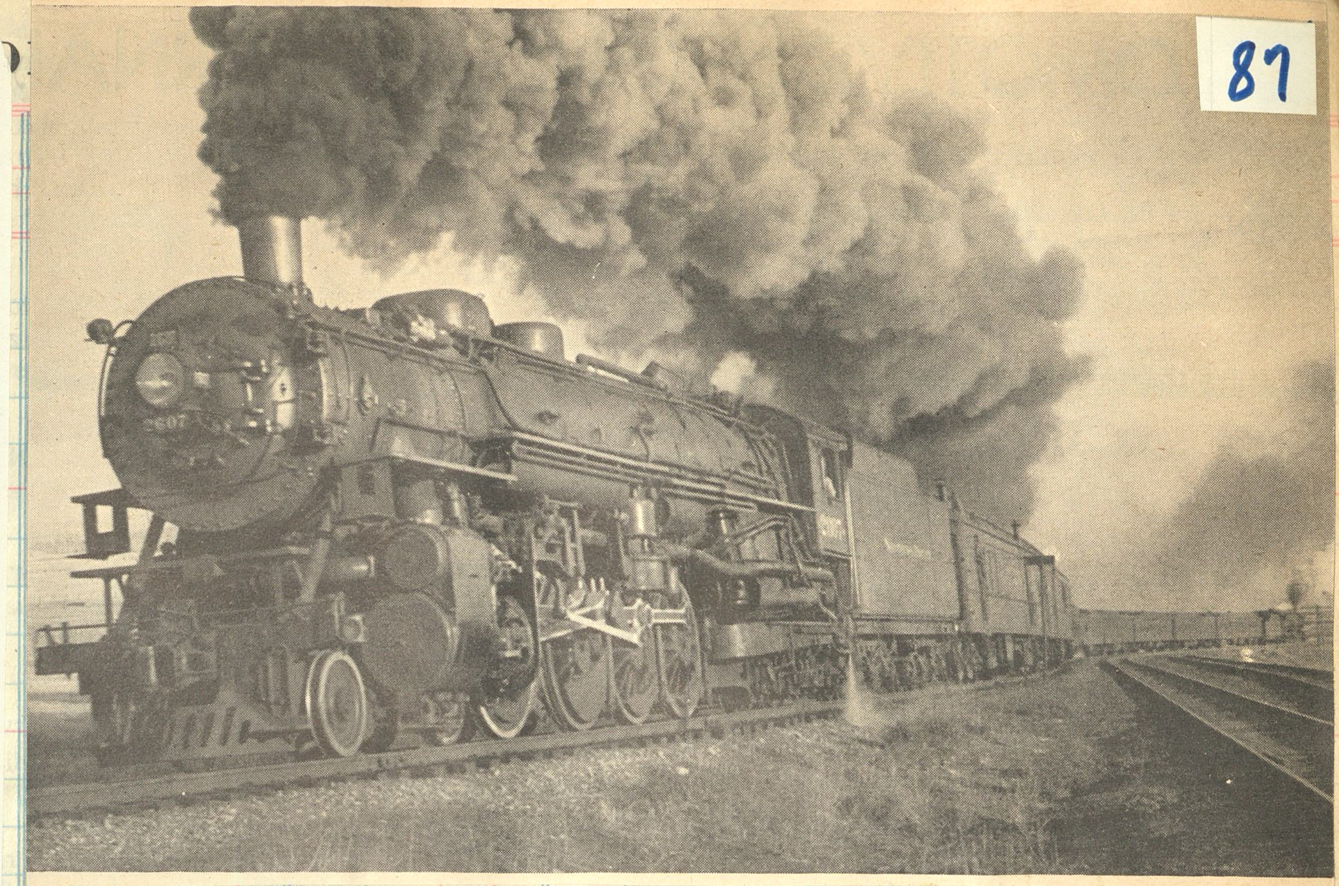



Outside the erection halls at Schenectady - Dec. 1926
2607
NP 2607
NORTHERN PACIFIC

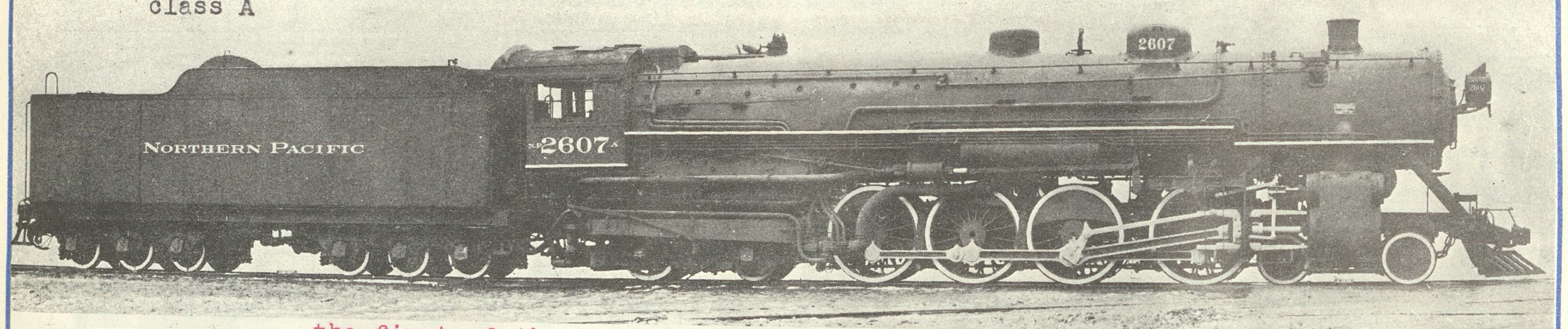



Firebox 162" x 102¼" Inside
Cylinders 28" x 30"
33, 3½" Tubes
182, 3½" Tubes
21'0"
74½"
111"
47'2" Total Wheel Base
62'6¾" Over All
9"
81"
84"
94"
76"
76"
91"
59"
86"
50¾"
44"
76" Guides
Int.
Main
53⅜" Back
53⅜" Front

Northern Pacific passenger locomotive No. 2607, built by the American Locomotive Company, Schenectady Works, January 1926.



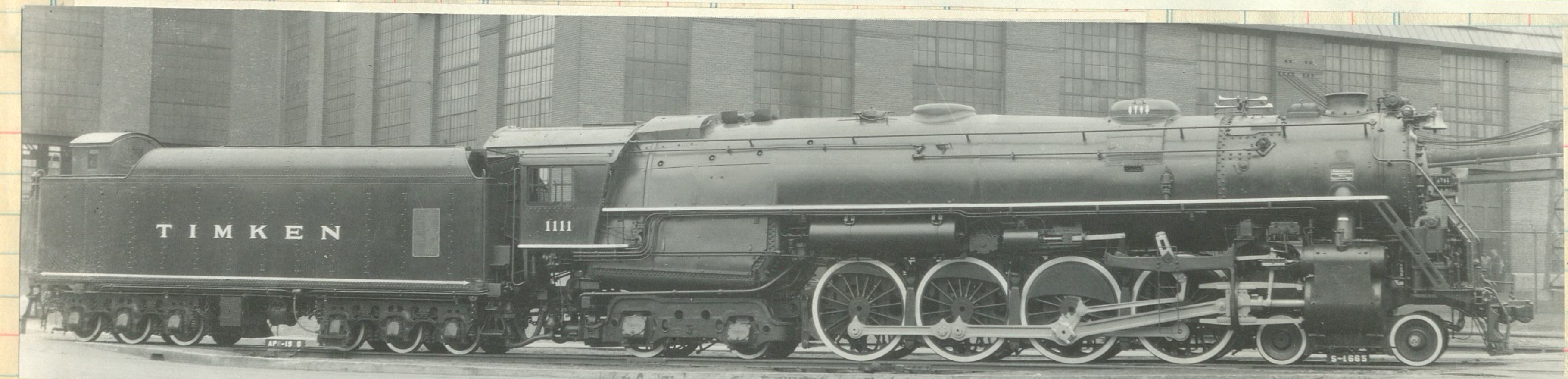
2600-2611
class A


NORTHERN PACIFIC
2607

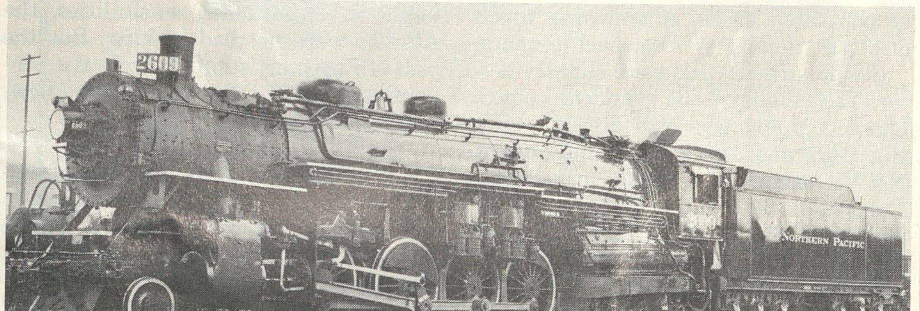
c/n 67017

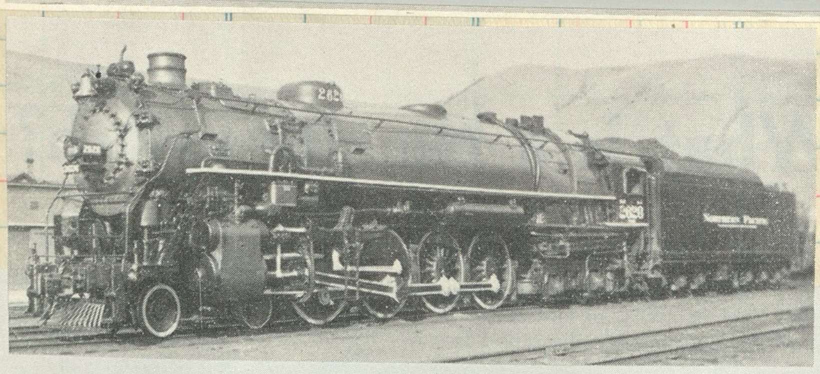
the first of the NORTHERN (4-8-4) type

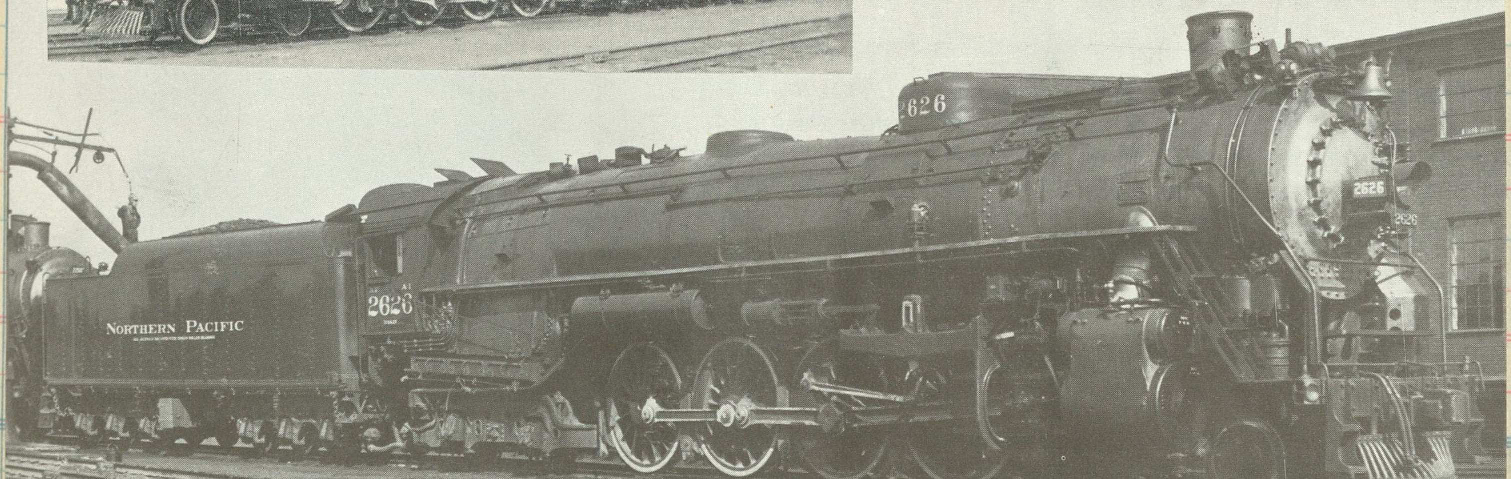
Northern Pacific passenger locomotive No. 2607, built by the American Locomotive Company, Schenectady Works, January 1926.

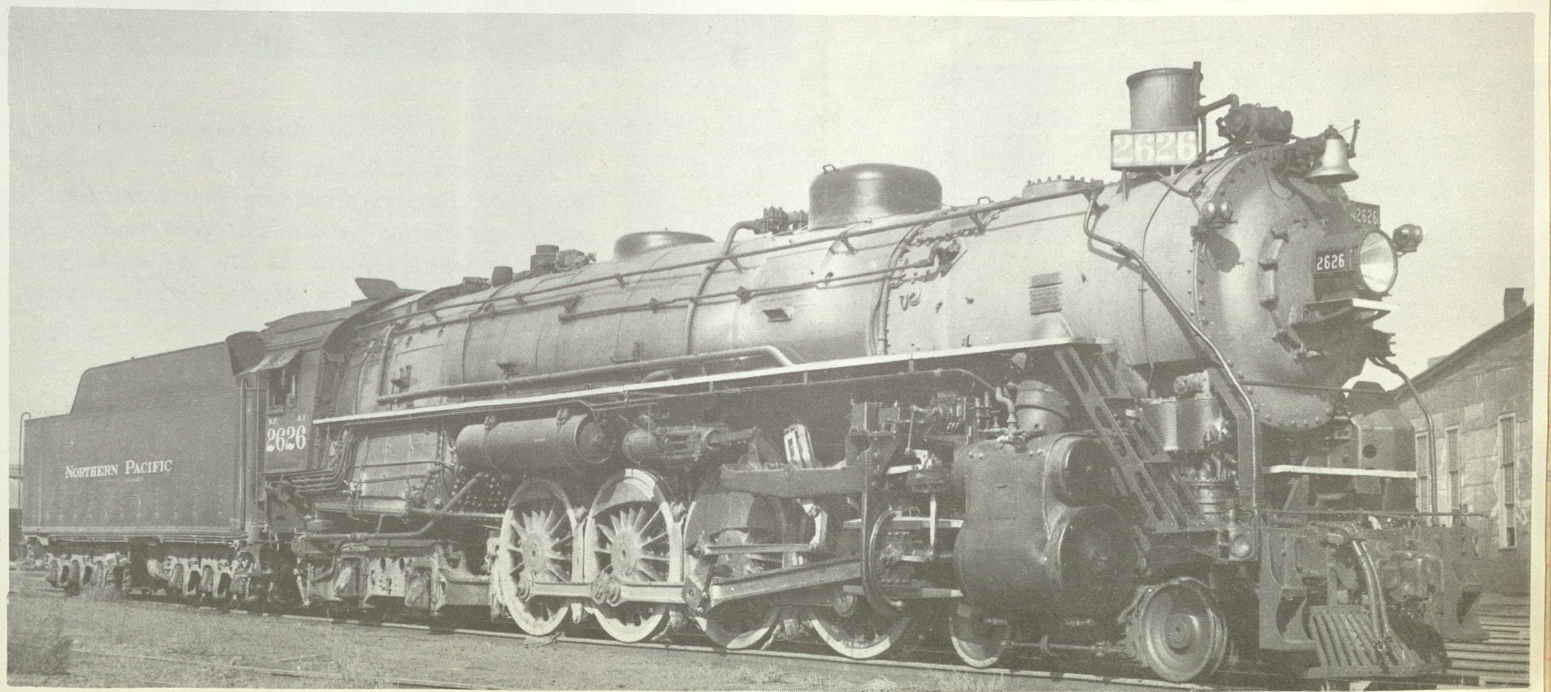

TIMKEN
1111

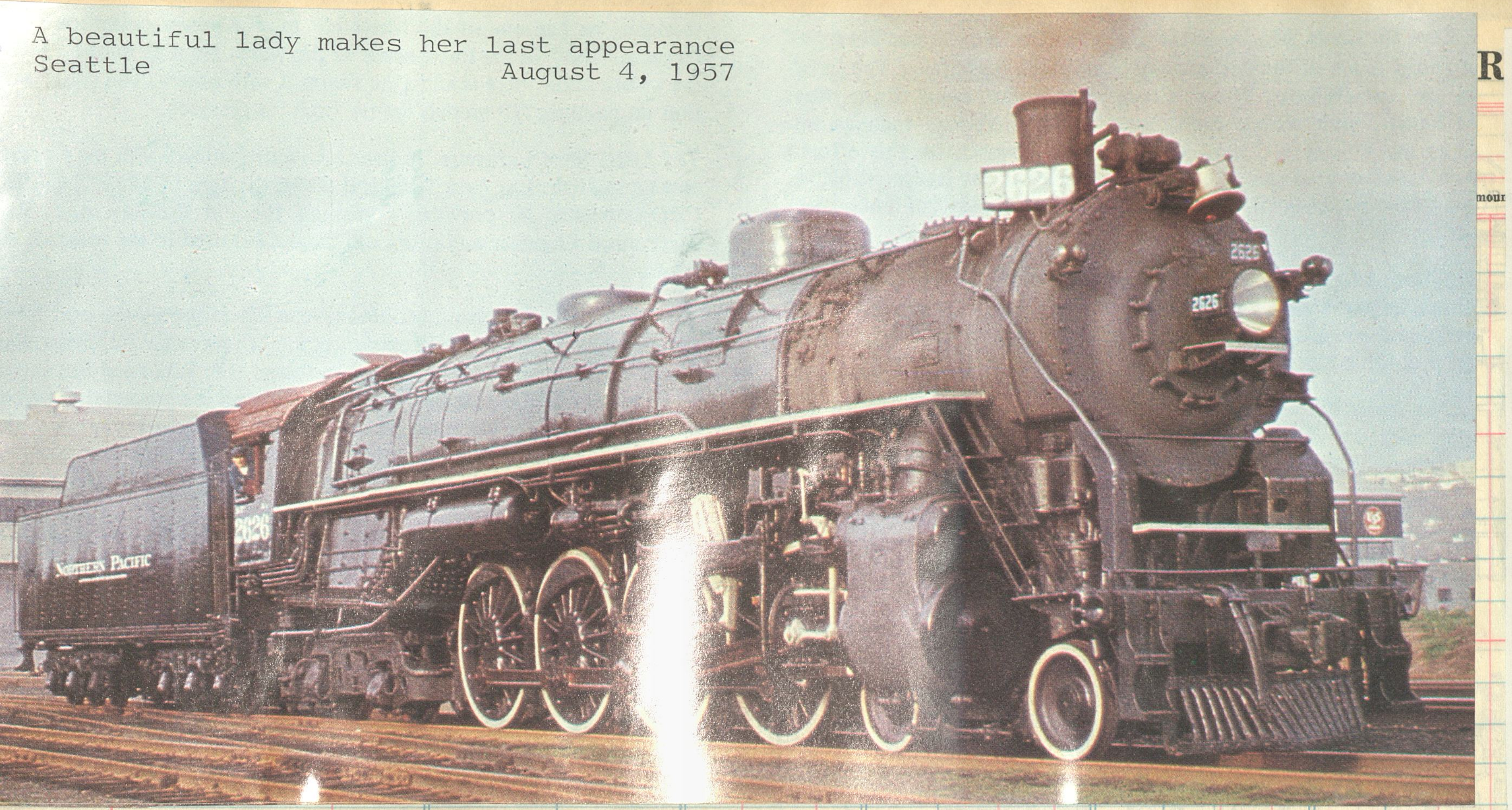
T.R.B.X. 1111 blt at Schenectady 1930
c/n 68056. After numerous tours that
demonstrated the merits of roller bear-
ings was sold to the N.P. in 1933 for
$33,000 and noed 2626

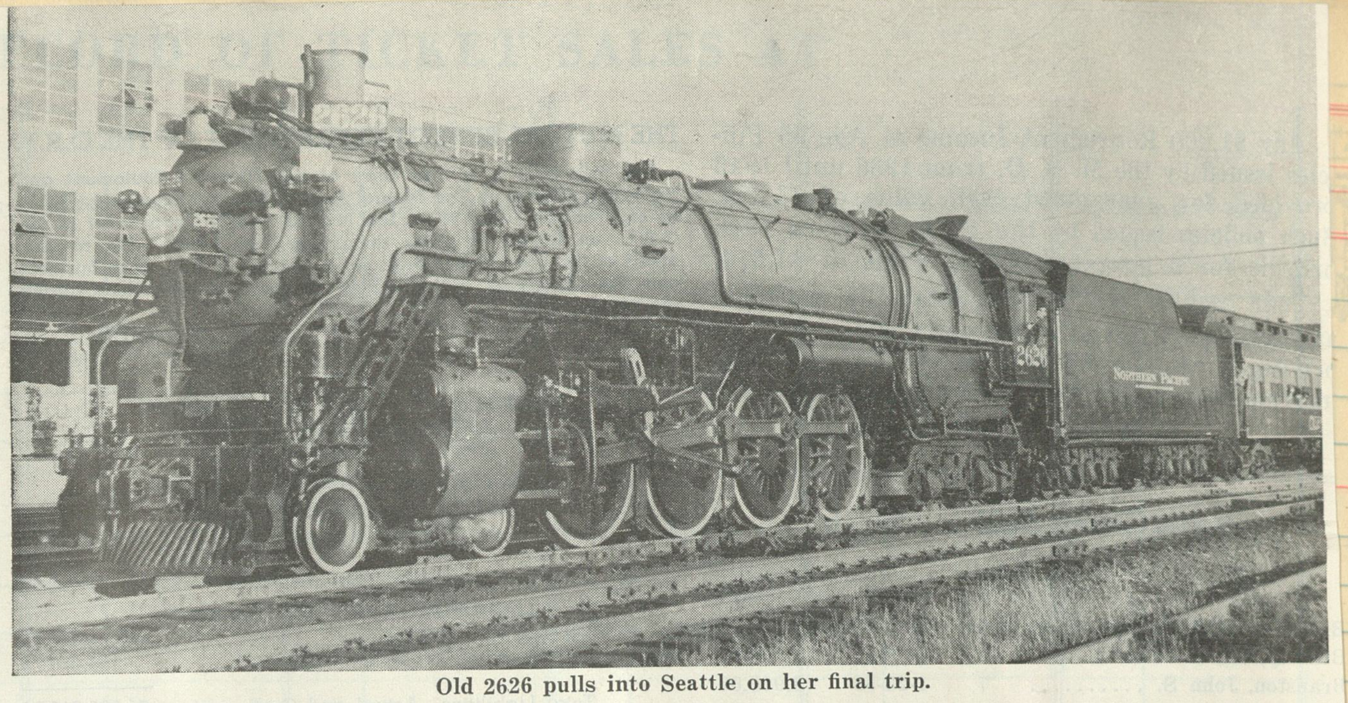





NORTHERN PACIFIC
2626


2626
NORTHERN PACIFIC


A beautiful lady makes her last appearance
Seattle August 4, 1957


Old 2626 pulls into Seattle on her final trip.

# Last Run for Old 2626

By R. V. Nixon
(1402-54)

PROBABLY more telegraphers in more places have "hooped up" orders to Timken 1111 than to any other locomotive. For the "Four Aces" was a boomer, working on fourteen different railroads before finally settling down as a homeguard on the Northern Pacific.

In 1930 the Timken Roller Bearing Company, American Locomotive Company and 52 major supply concerns co-operated in building what many considered to be the world's most handsome locomotive. Designated "TRBX 1111," the giant 4-8-4 was capable of handling hot-shot passenger trains at 100 miles per hour, or of dragging 125-car freights of 6,000 tons.

The first locomotive completely equipped with roller bearings, Four Aces made headlines after a friction test on the Pennsylvania when three ladies pulled the huge engine—355 tons—back and forth on level track.

The 1111 saw practically every type of service while loaned to the New York Central and Pennsylvania. She was then used on the C&O, New Haven, B&M, Lackawanna, Lehigh Valley, Nickel Plate, C&A, MoP, Burlington and NP.

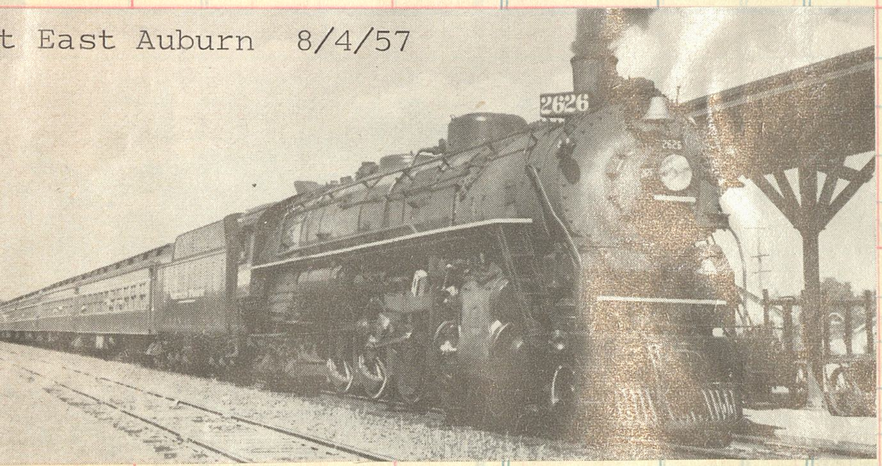
At then end of 100,000 miles of testing roller bearing operation, the Four Aces was sold to the Northern Pacific, renumbered to 2626 and Classified A-1. For years she scorched the ballast with the famed North Coast Limited and the speedy Seattle - Portland passenger trains.

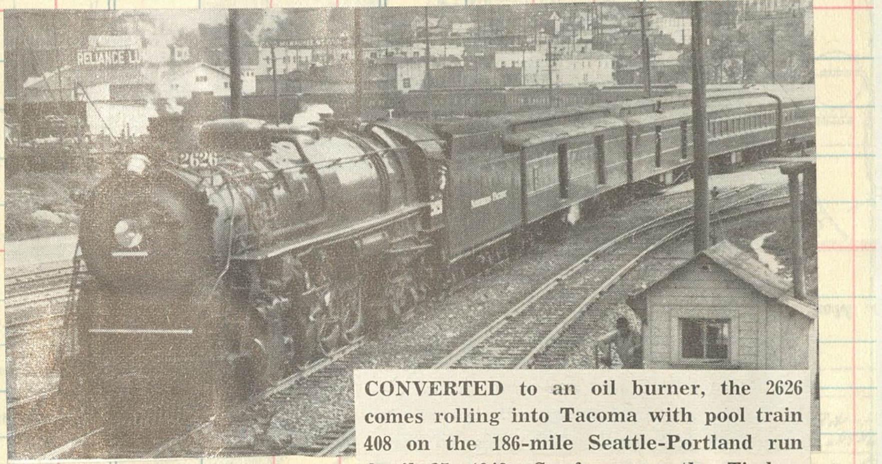
Then came the diesel. Sleek 2626 was unceremoniously banished to a stall in the Seattle roundhouse, pinch-hitting once in a while for diesels, but seldom drawing a run. For a time it was rumored that she was to be re-purchased by the Timken Company for permanent exhibition, but plans fell through.

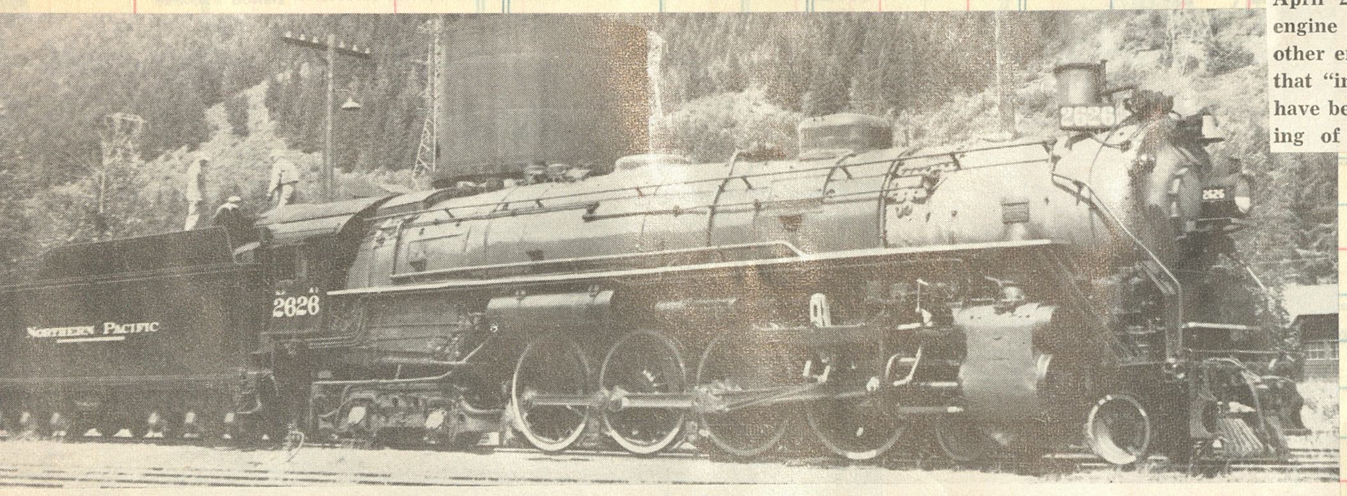
On August 4th, 1957, after nearly two years of inactivity, the impossible happened—and 2626 was called to handle a passenger train Seattle to Cle Elum and return. Shortage of diesels? Nope. . . It seems that a number of steam enthusiasts in the Seattle area had been promoting rail-fan trips powered by steamers while a few were left. A ten-wheeler of 1902 vintage had been used on previous trips, but it was decided that 1372 lacked the oomph to climb the Cascade mountains. So 2626 made one more trip.

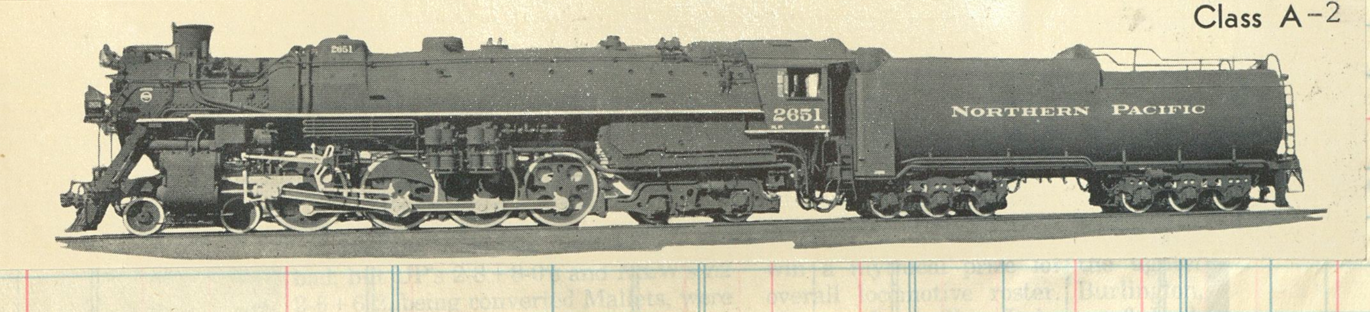
And a glorious trip! Photographers swarmed all over her, making thousands of pictures. Sound recordings were made of her chime whistles and melodious bell as she snorted out of Seattle. People lined the right-of-way making movies and still shots as she roared by at 65 miles per hour.

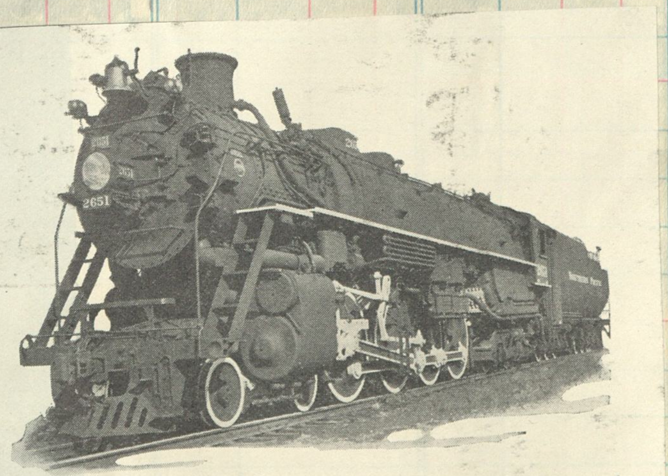
Over the Cascades, through Stampede tunnel and then down the 2.2 per cent grade to Cle Elum, 2626 was in her glory. With photo enthusiasts shooting every move, she turned on the Cle Elum wye and took a drink of water. Her last set of orders, and last of thousands of clearances were issued by Bro. Claude Eberle. Then, with two mournful blasts of her whistle, Timken 1111, the veteran that had hauled more famous trains on more railroads than any other, shoved off on her last trip, destined never to run again.

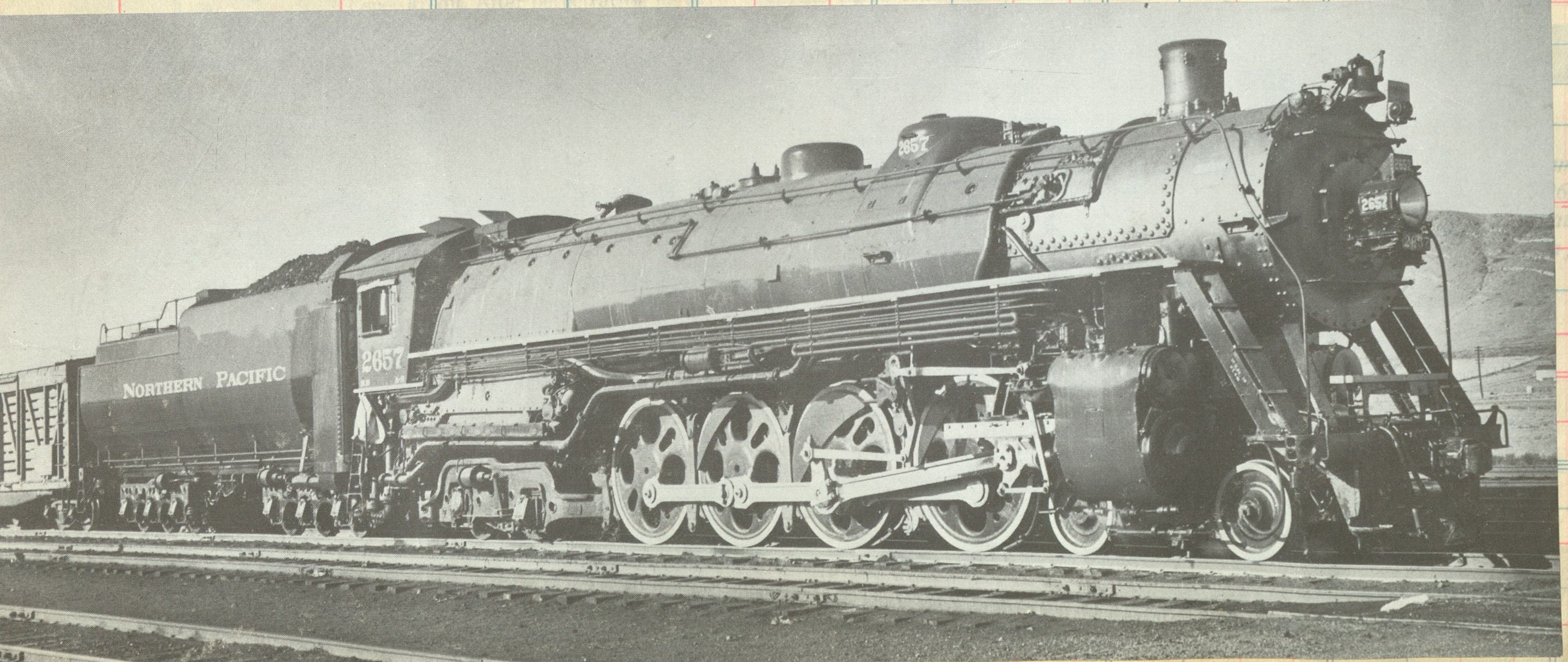

t East Auburn 8/4/57

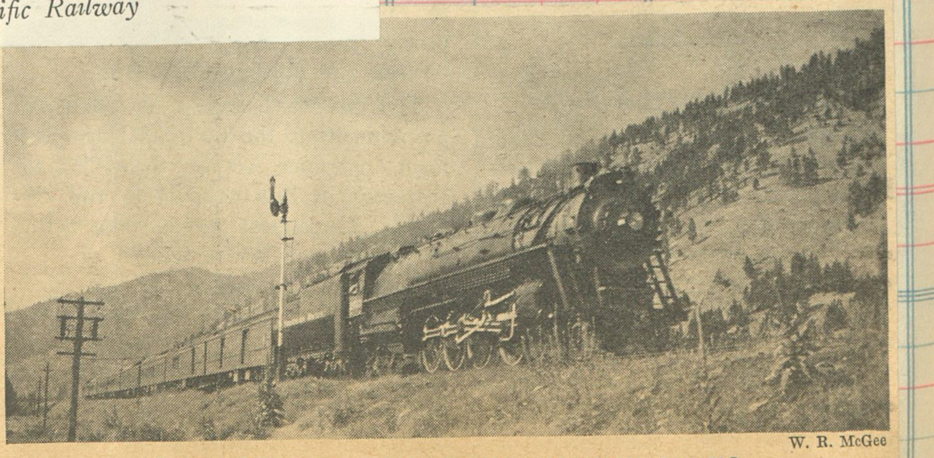

CONVERTED to an oil burner, the 2626 comes rolling into Tacoma with pool train 408 on the 186-mile Seattle-Portland run April 25, 1949. So free was the Timken engine from the pounding and vibration of other engines that she gave the impression that "in some way the reciprocating parts have been thrown out of gear with the closing of the throttle." So read a report.


king on fuel oil, Lester, Wash. 8/4/57


Class A-2


*One of the Ten Modern Baldwin Locomotives, of the 4-8-4 Type, Recently Built for the Northern Pacific Railway*




W. R. McGee

NORTH COAST LIMITED OF THE NORTHERN PACIFIC

Locomotive 2653 is pulling second section of train 2, North Coast Limited, in Hellgate Canyon, 10 miles east of Missoula, Mont., with eight cars in train.

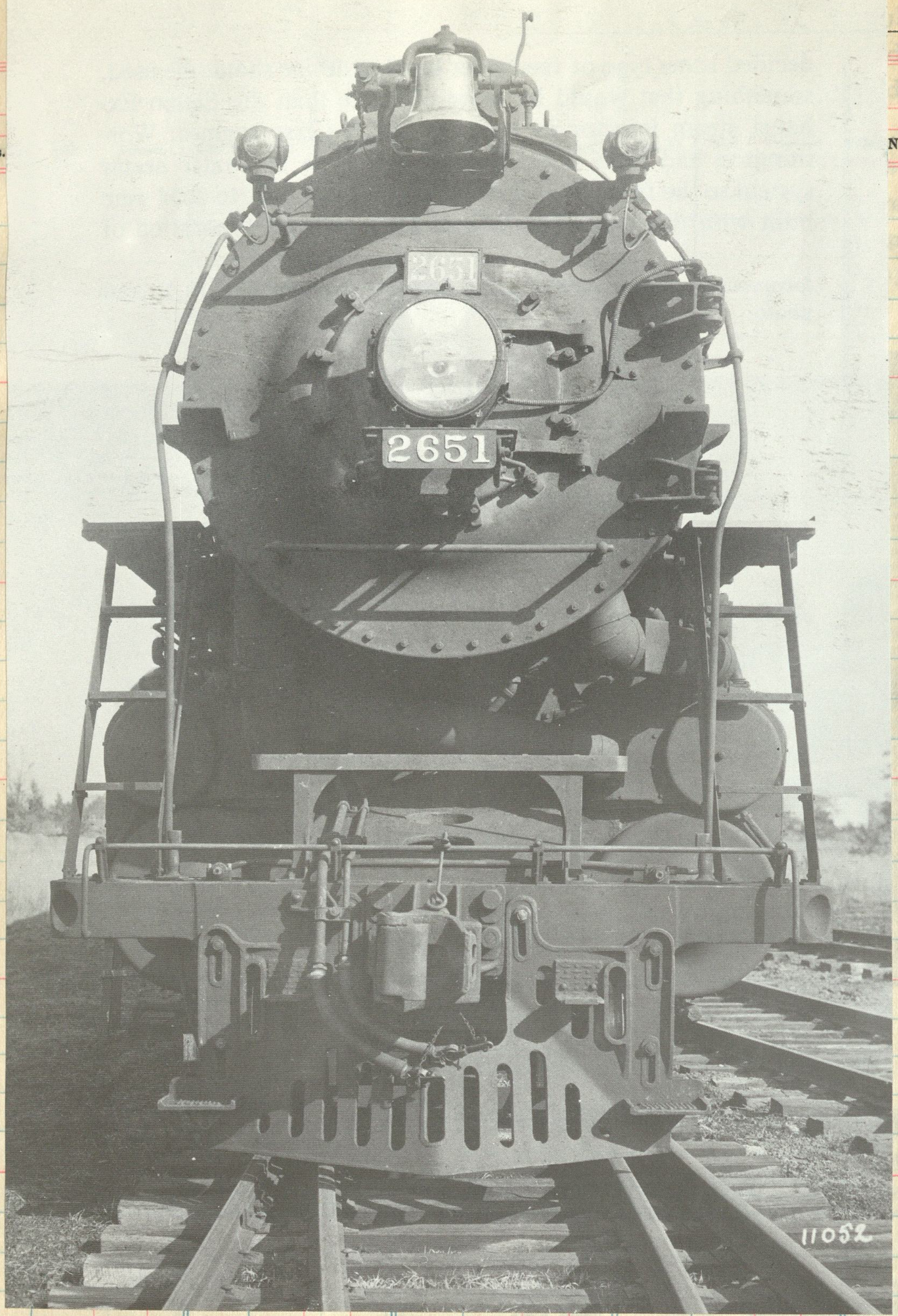
89

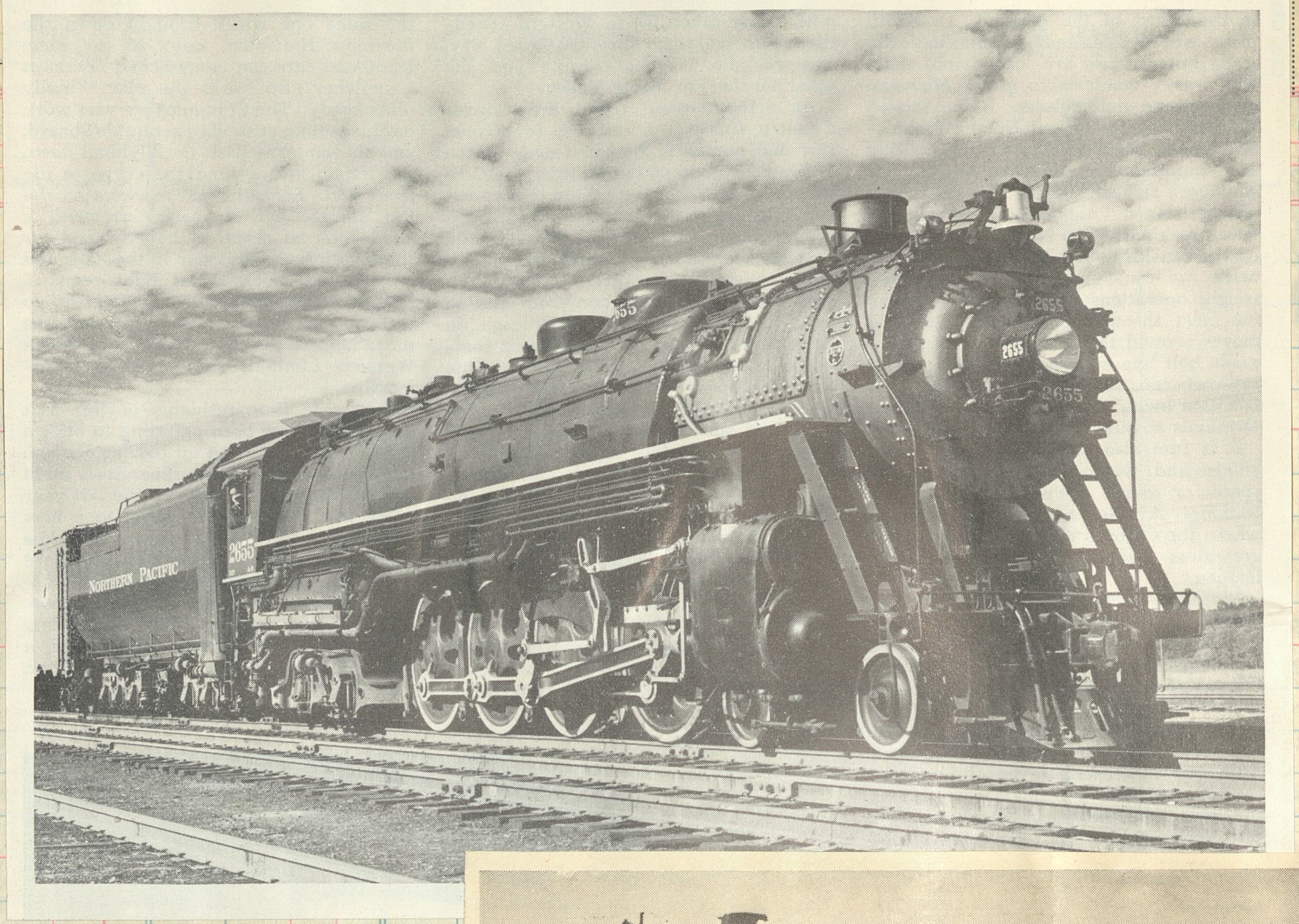
To Make Short Sheet

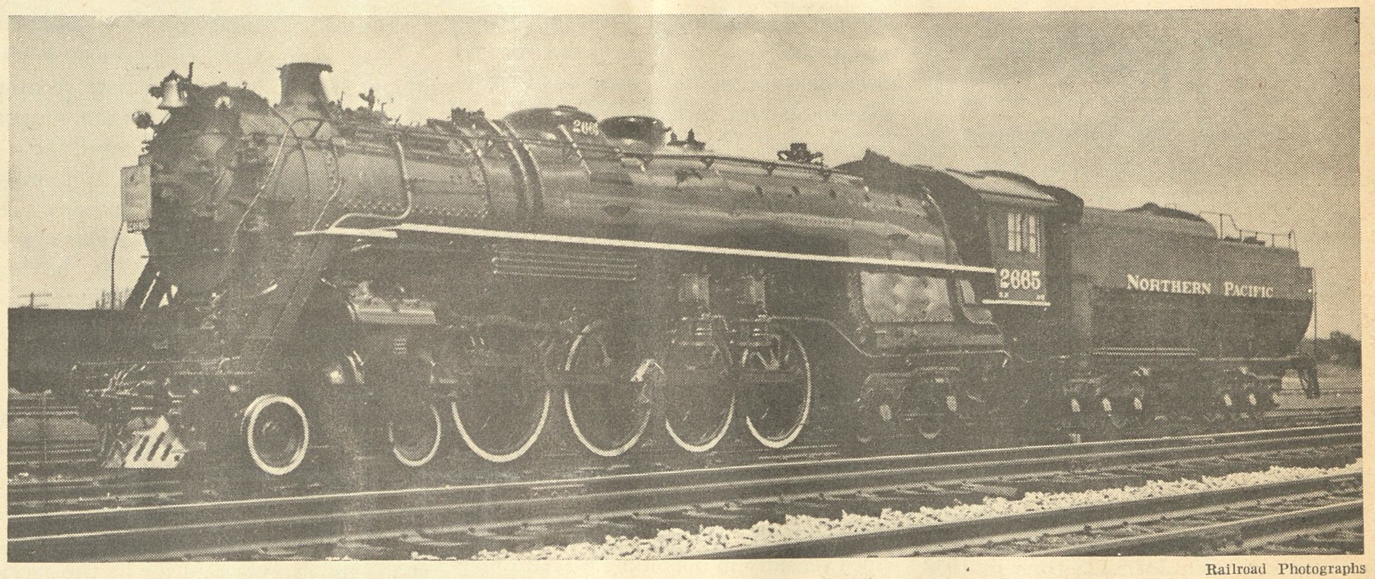
Clos.

No.

| Clos. No. | Sold | Amount | Clos. No. | Sold | Amount |
|---|---|---|---|---|---|



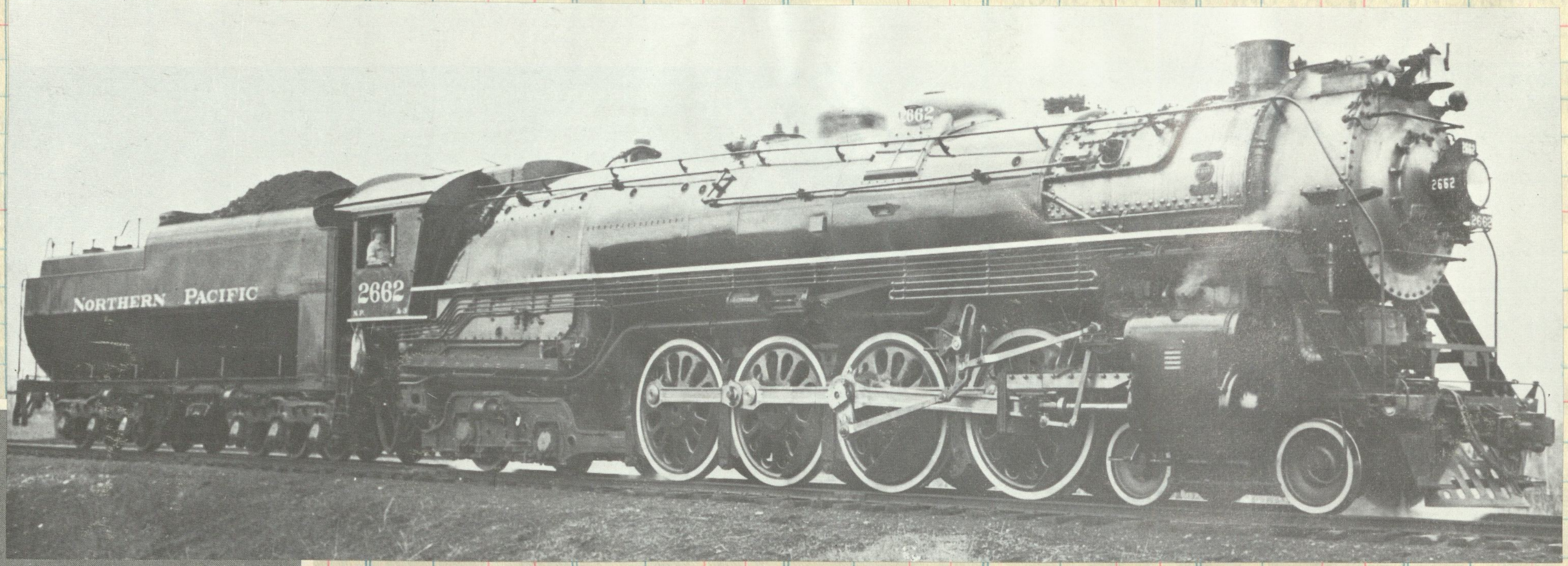




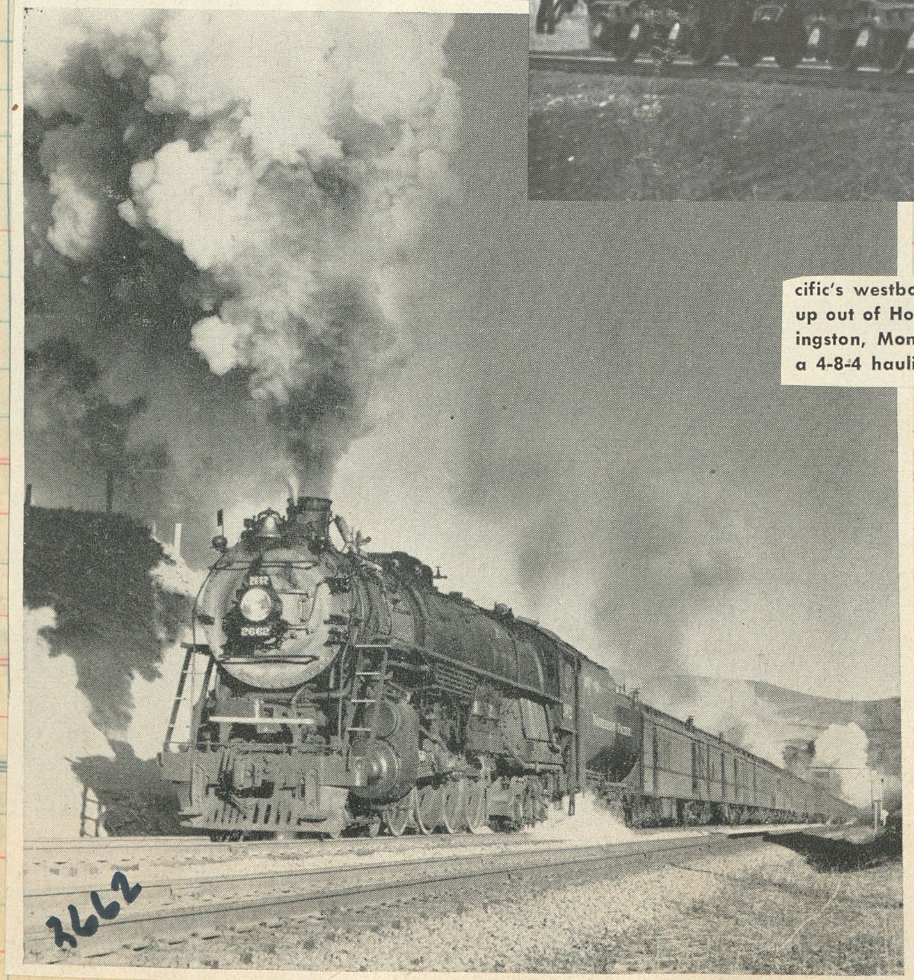
Railroad Photographs

READY FOR DELIVERY TO NORTHERN PACIFIC

Locomotive 2665 of the Northern Pacific, built at the Baldwin Works, was photographed at Columbus, Ohio, set out for riding in a freight train over the Pennsylvania Line toward its destination.

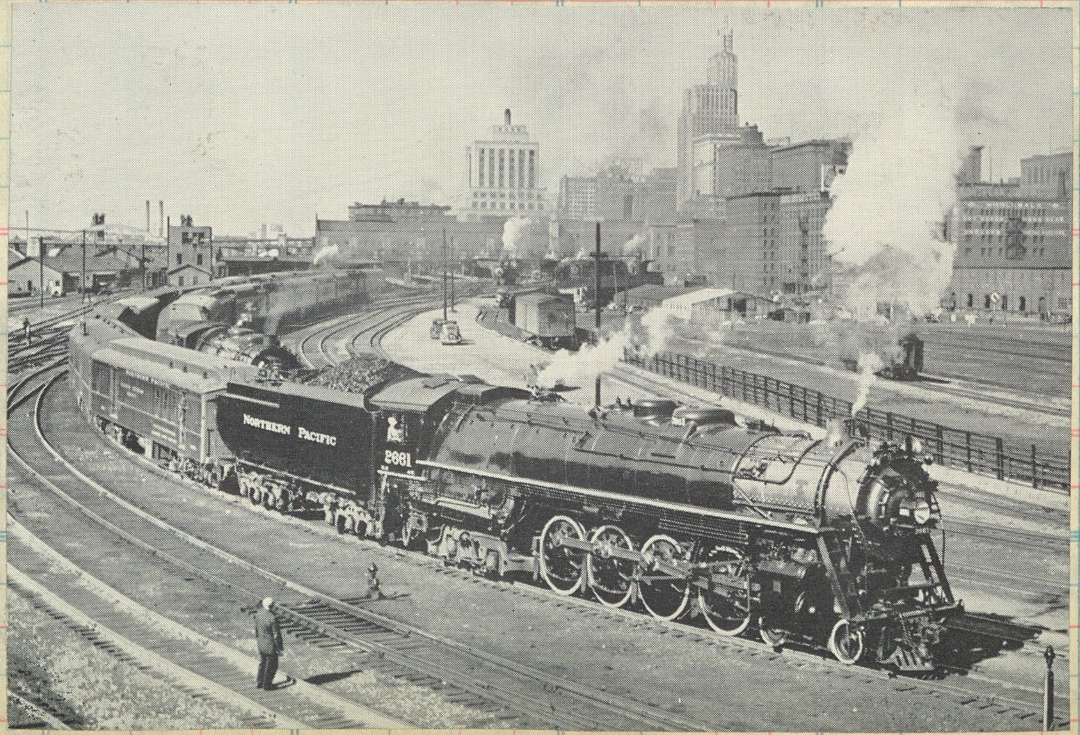


Northern Pacific's westbound North Coast Limited thunders up out of Hoppers Tunnel (10 miles west of Livingston, Mont.) on a 1.8 per cent grade with a 4-8-4 hauling 16 cars. A Mikado is pushing.



2662

The east end of St. Paul Union Station is without a doubt the best place in the Twin Cities for train-watching. Although the layout is of the through type, trains of most railroads leave eastward to go west to Minneapolis, and wye northeast of the station. Because of this maneuver most trains, like the *North Coast Limited* shown here, pass the east approach twice, once when they arrive and once when they leave. From 7:30 to 9 in the morning several dozen trains can be seen from the viaduct east of the station. Courtesy Northern Pacific.



Total

Add—Error

DATE

Deduct "

DATE

Total

Add Working Fund

Total to be Accounted for

Cash to Agent

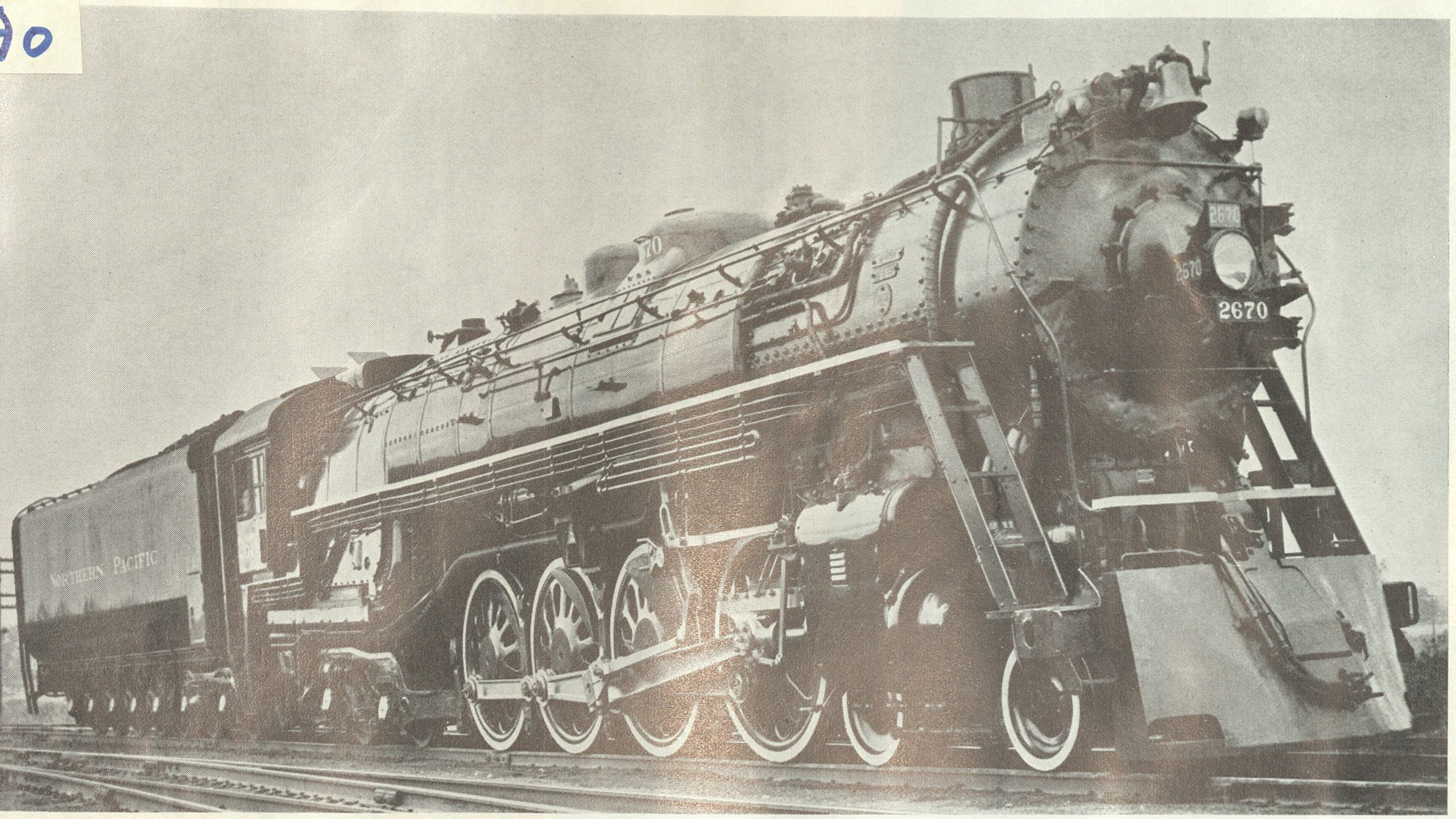
Agent's Signature

Cash to next Seller

Next Seller's Signature

Total Accounted for

8 - 4-8-4 Class A



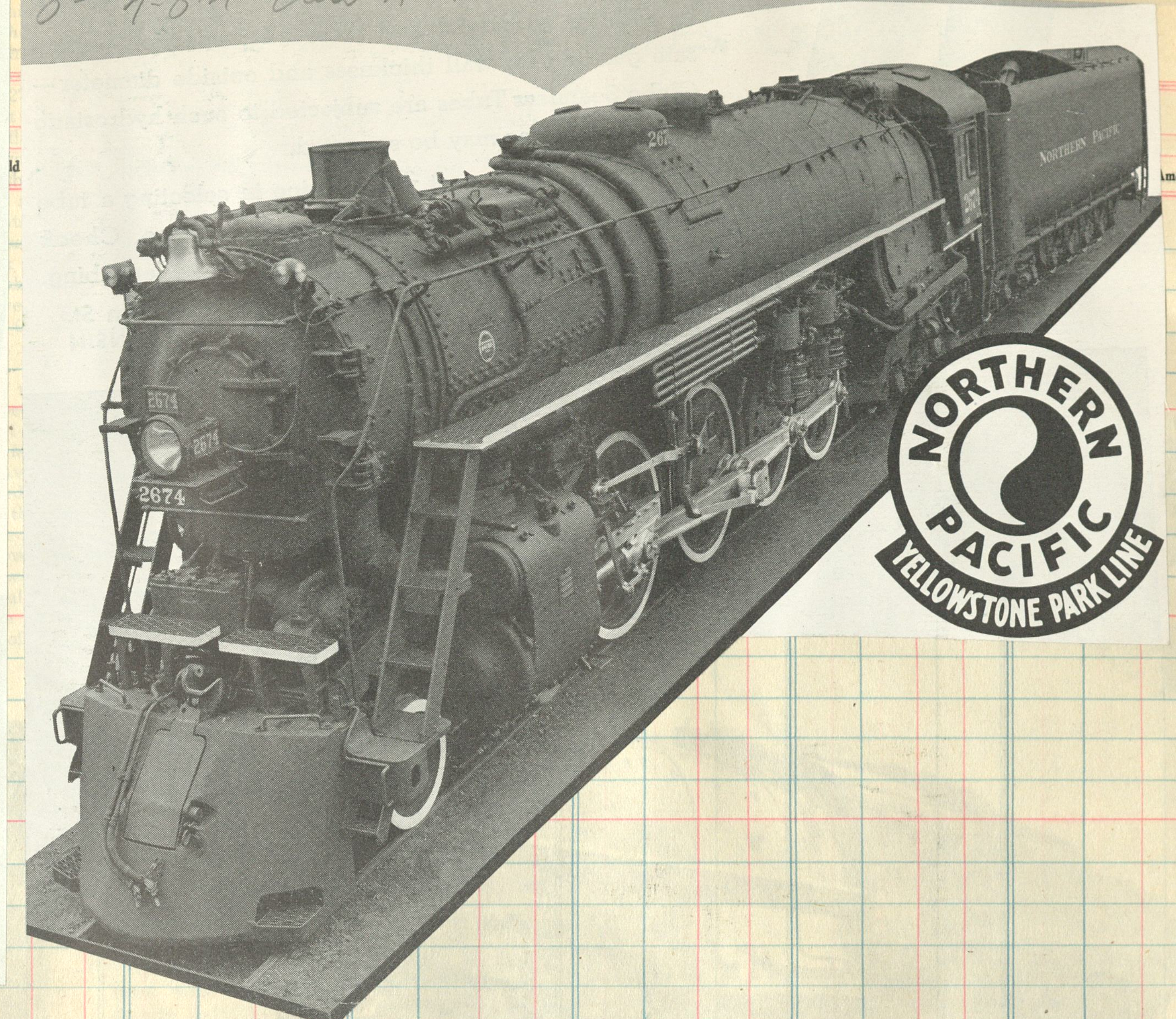
C. L. Tilbury, 1120 W. 19th Ave., Spokane, Wash. Courtesy Northern Pacific.

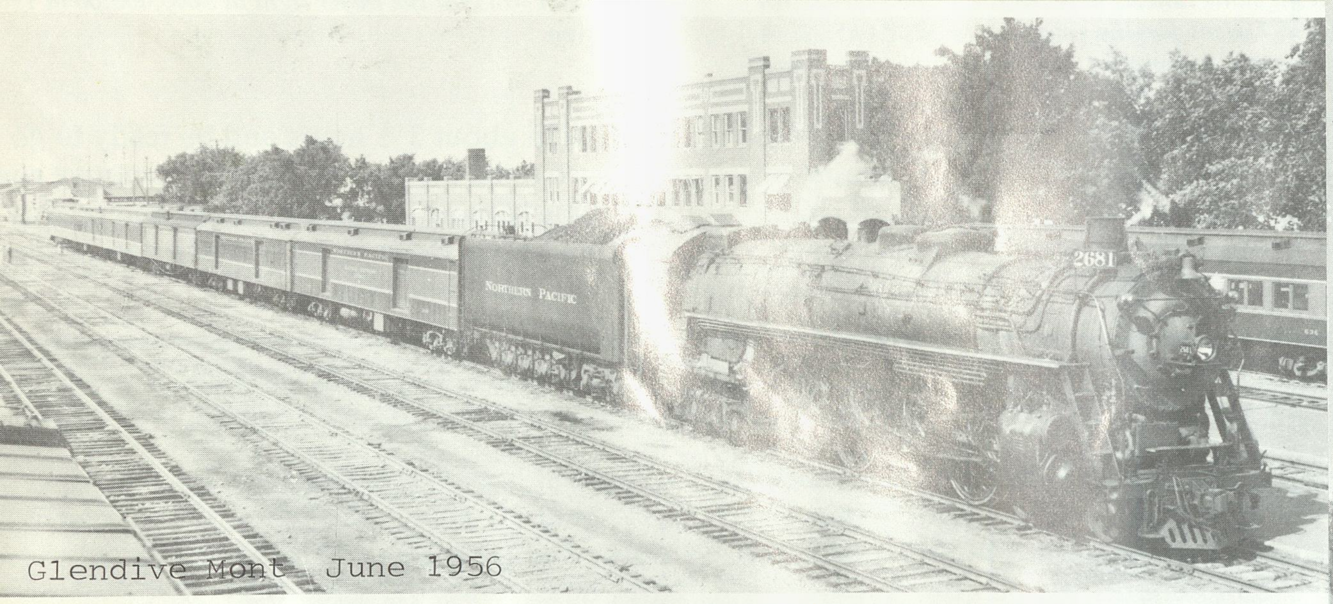
## New Northern Pacific 4-8-4 (1941)

he 4-8-4 type of locomotive, now so popular, has no generally accepted name, but the nearest to ceptance is "Northern type," because the Northern Pacific was among the first roads to use this heel arrangement. The eight new Class A-4's built for Northern Pacific recently by Baldwin are umbered 2670 to 2677. Running between St. Paul, Minn., and Livingston, Mont., 1008 miles, they handle ain operation continuously for 24 hours 35 minutes westbound, and 23 hours 10 minutes eastbound.

**Specifications:**

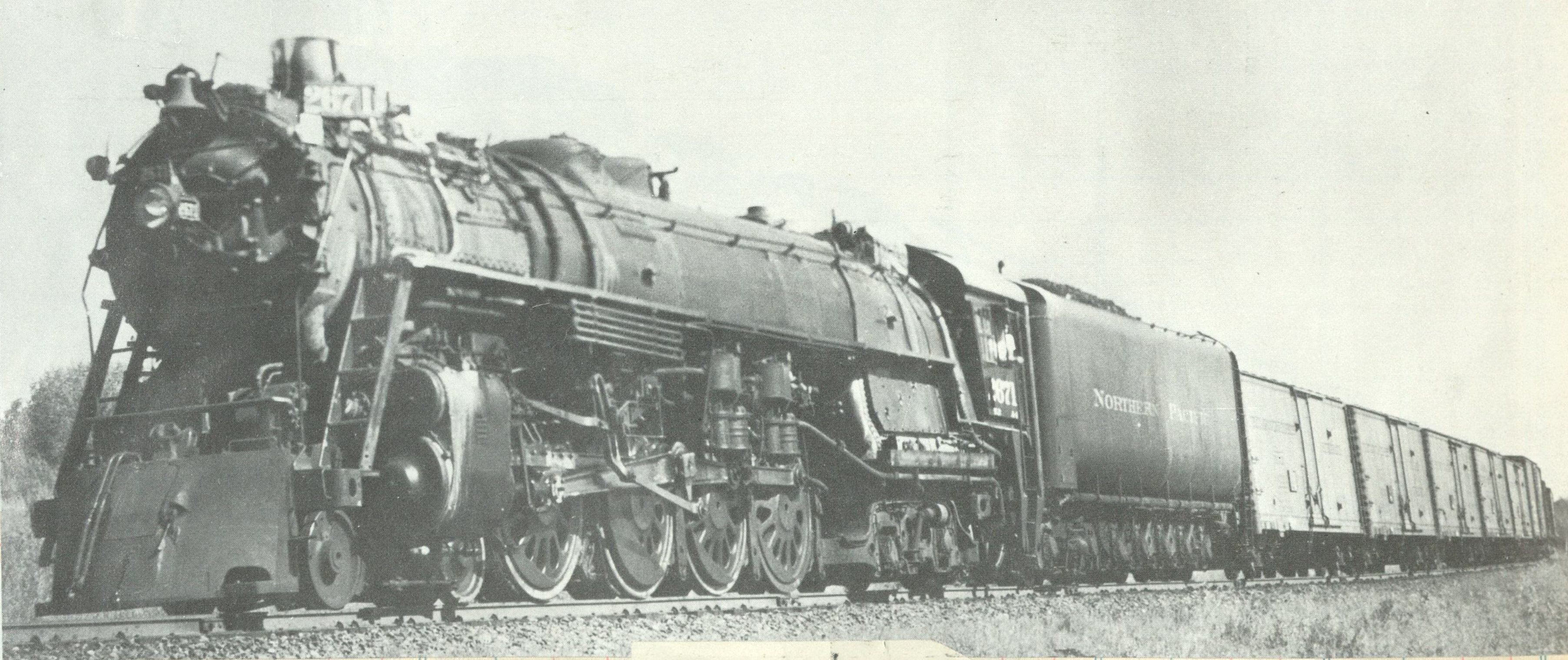
| | |
|---|---|
| Tractive force | 69,800 lbs. |
| Drivers, diameter | 77" |
| Weight on drivers | 294,000 lbs. |
| Weight in working order | 945,800 lbs. |
| Boiler pressure | 260 lbs. |
| Tender capacity | Water, 25,000 gals.; coal, 27 tons |


2674
NORTHERN PACIFIC
YELLOWSTONE PARK LINE

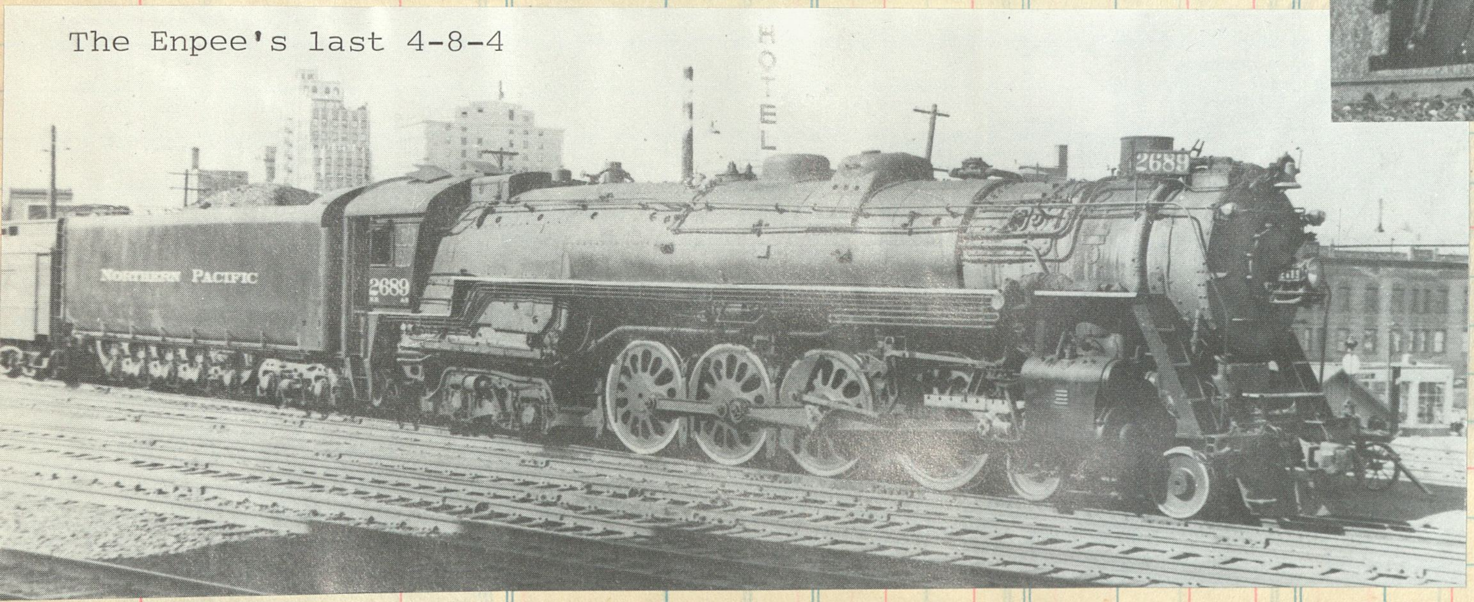


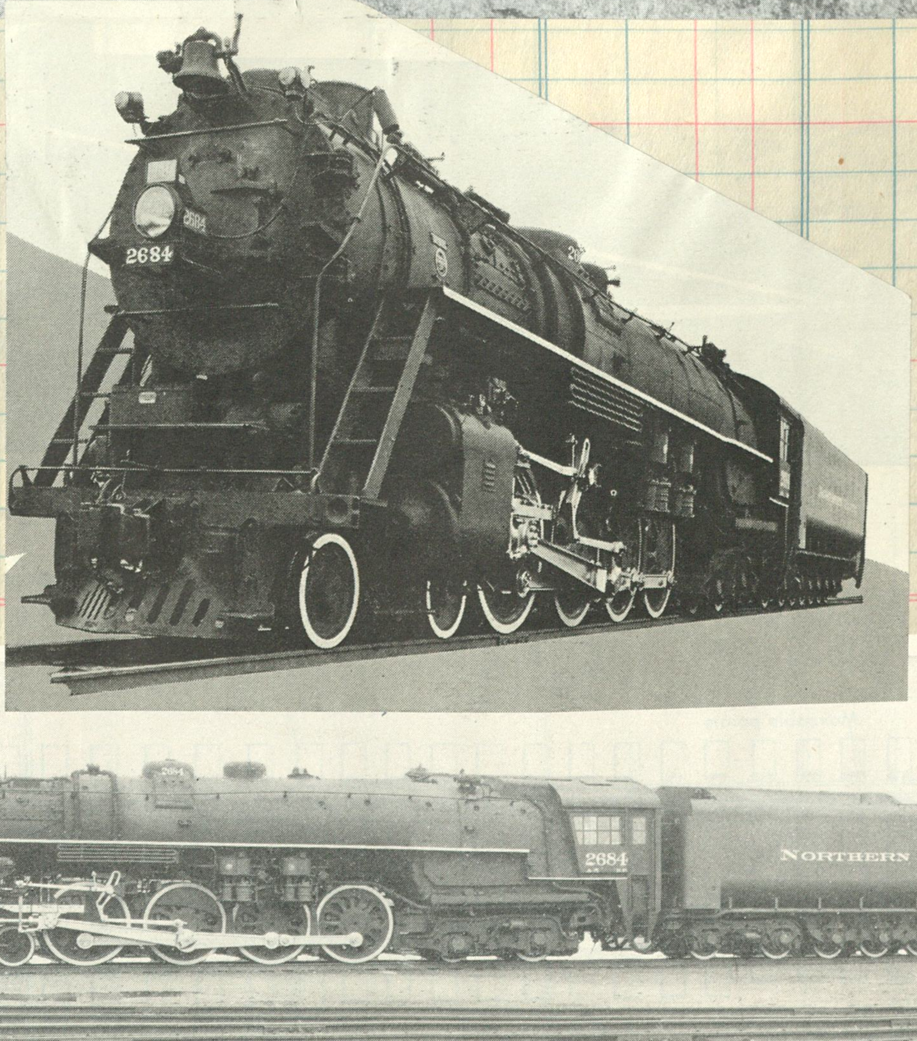
Glendive Mont June 1956

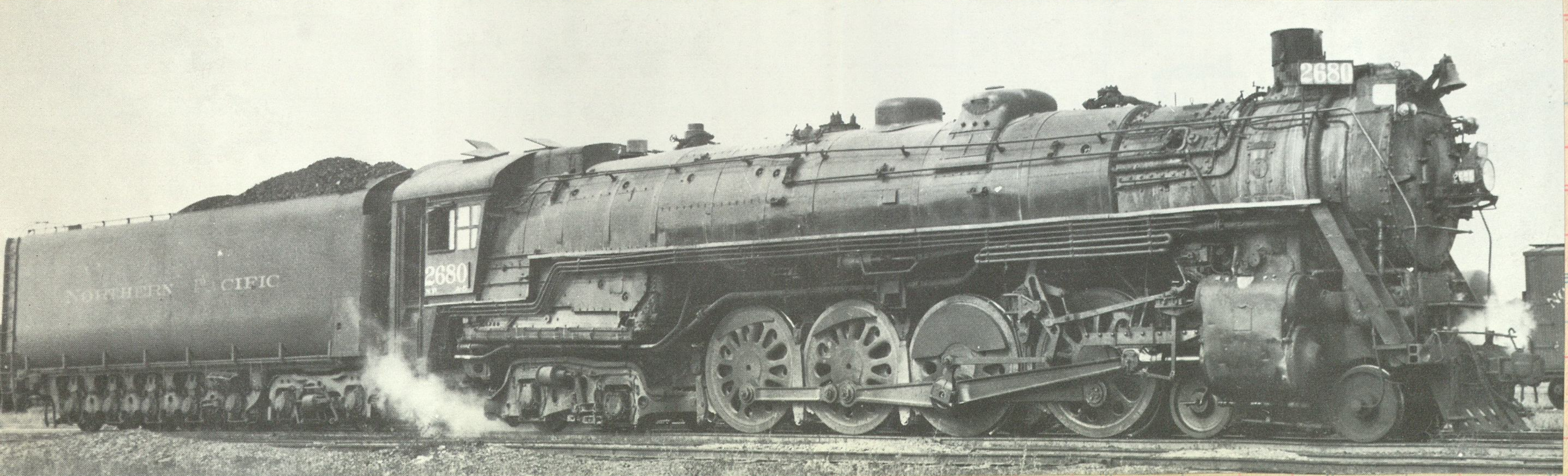
2671 with a 90 car eastbound extra near Randall, Minn.

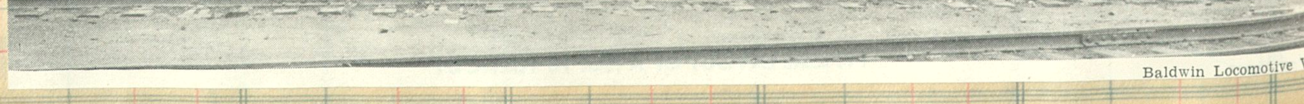


The Enpee's last 4-8-4


HOTEL
2689
NORTHERN PACIFIC



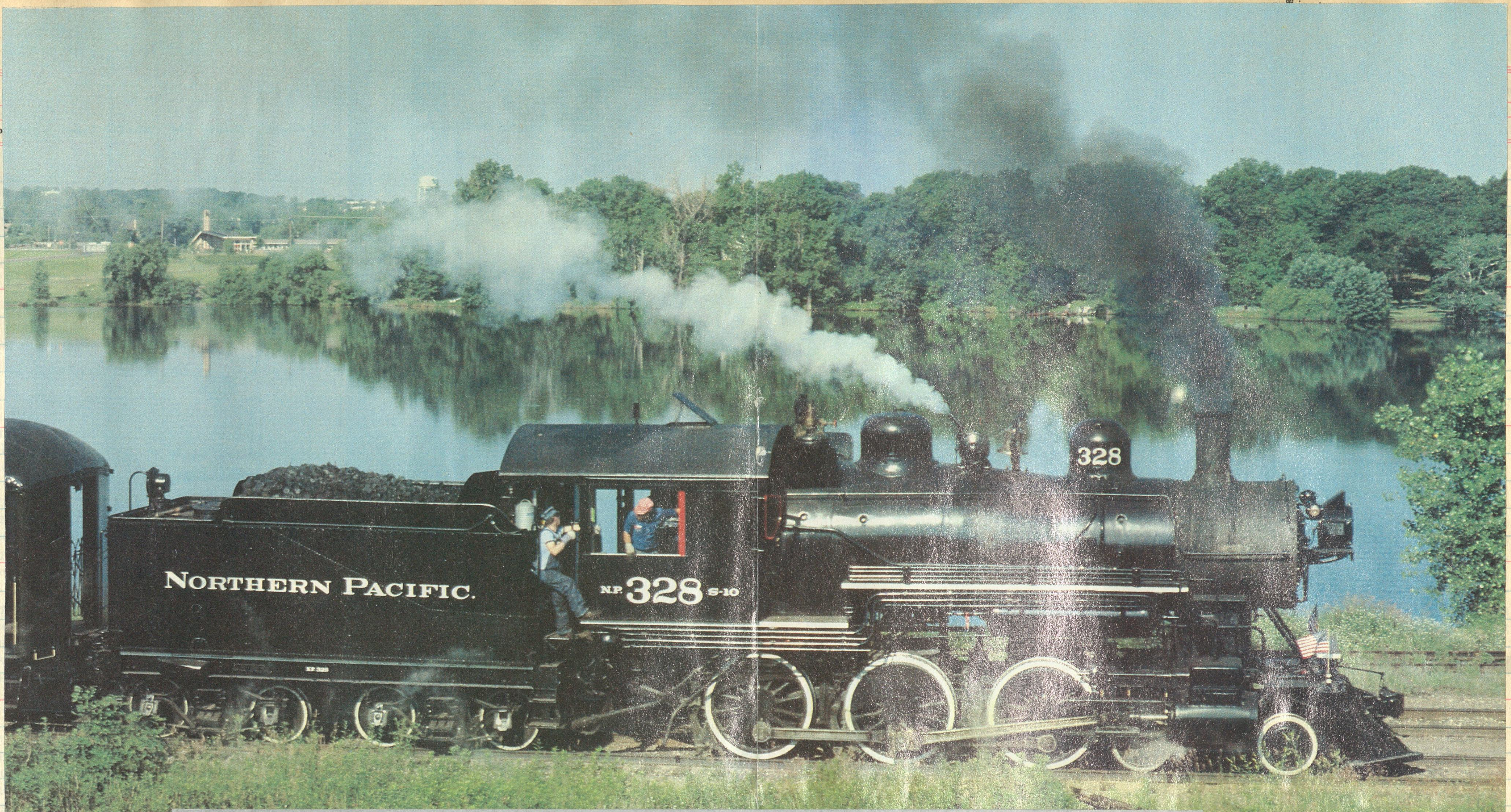

2680
NORTHERN PACIFIC


2684
NORTHERN PACIFIC

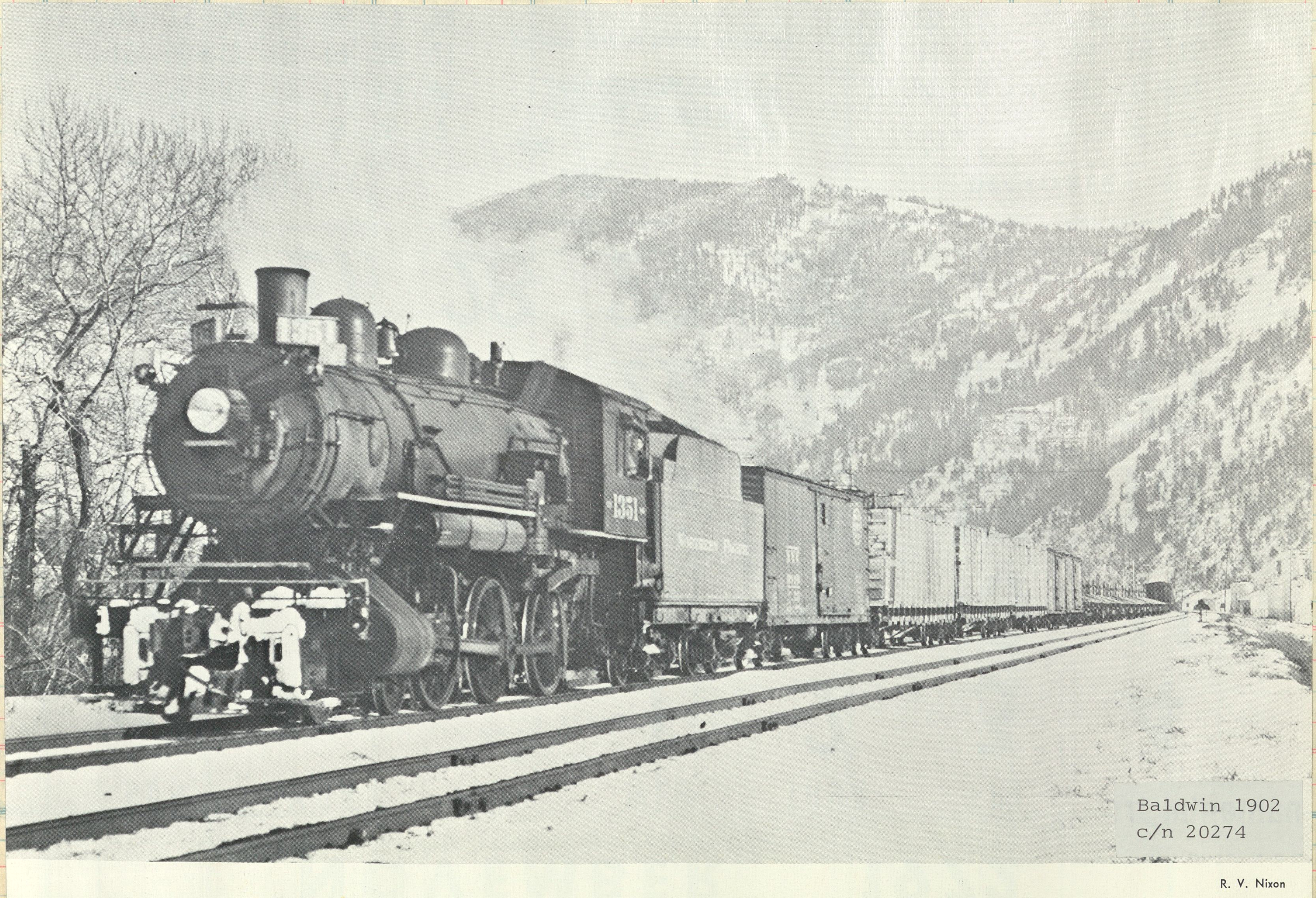
Baldwin Locomotive Wo

Clos. No. Sold Amount Clos. No

Sold Amount


328
NORTHERN PACIFIC.
N.P. 328 S-10

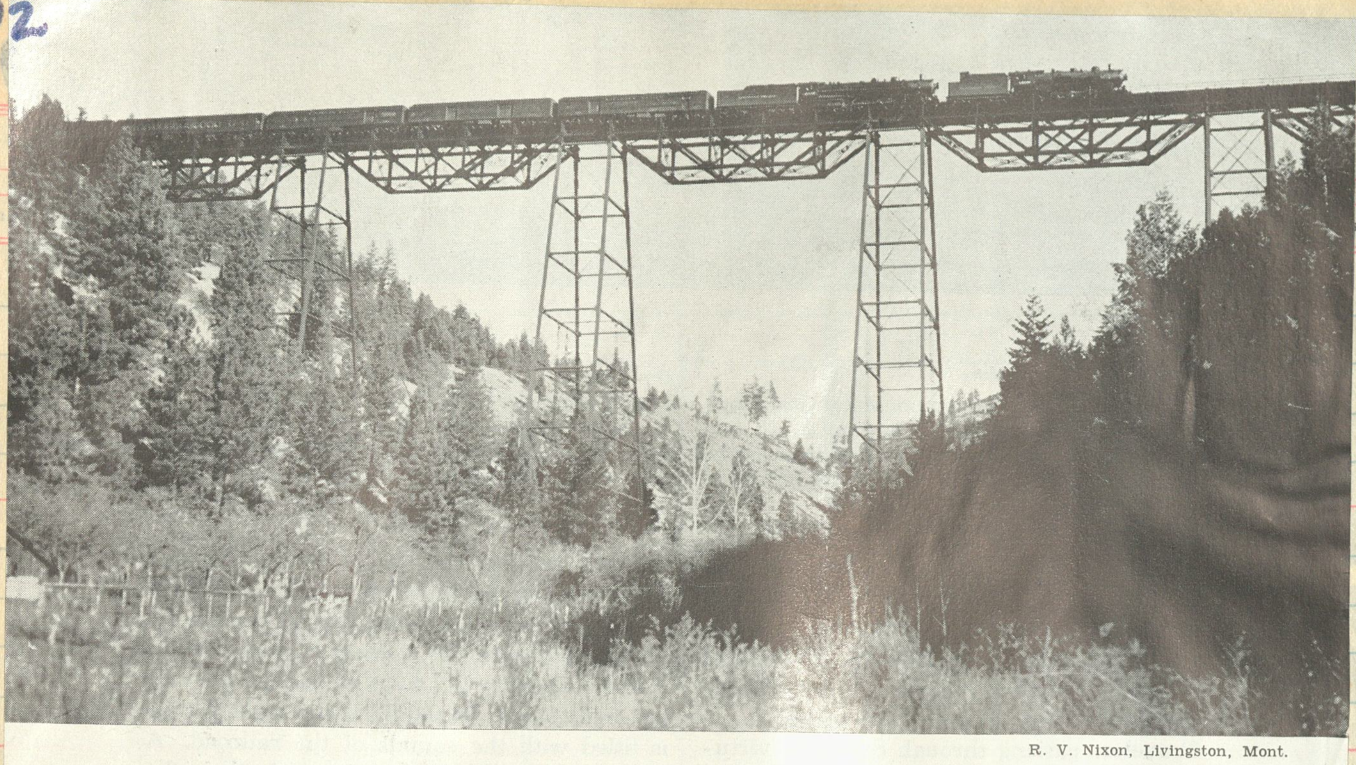
Another old girl given a new lease on life. The 328 was one of ten 4-6-0's delivered by Rogers (c/n 37583) in Feb 1907 and noed 320-329. After five years in rebuilding by the Minnesota Transportation Museum she is alive again-July 5th 1981 at New Brighton, Minn.


1351
NORTHERN PACIFIC

Baldwin 1902
c/n 20274

R. V. Nixon

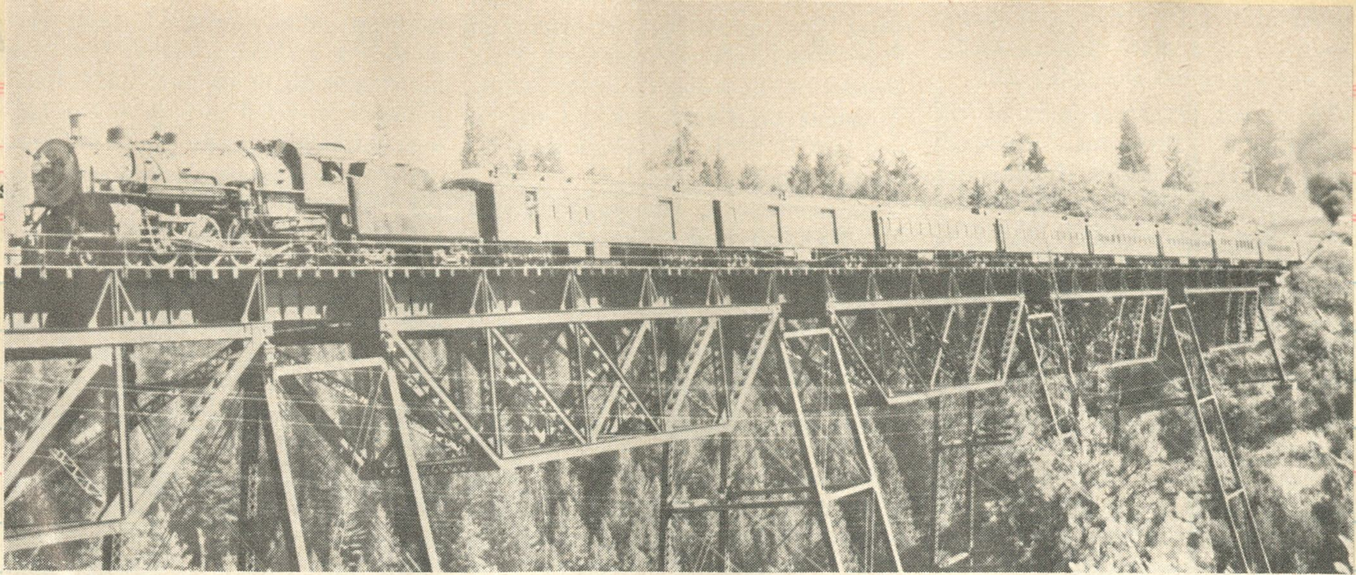
Northern Pacific 1351, a 4-6-0, arriving Missoula, Mont. with the Philipsburg local. Feb. 1955



R. V. Nixon, Livingston, Mont.

## Highest trestle on the Northern Pacific.

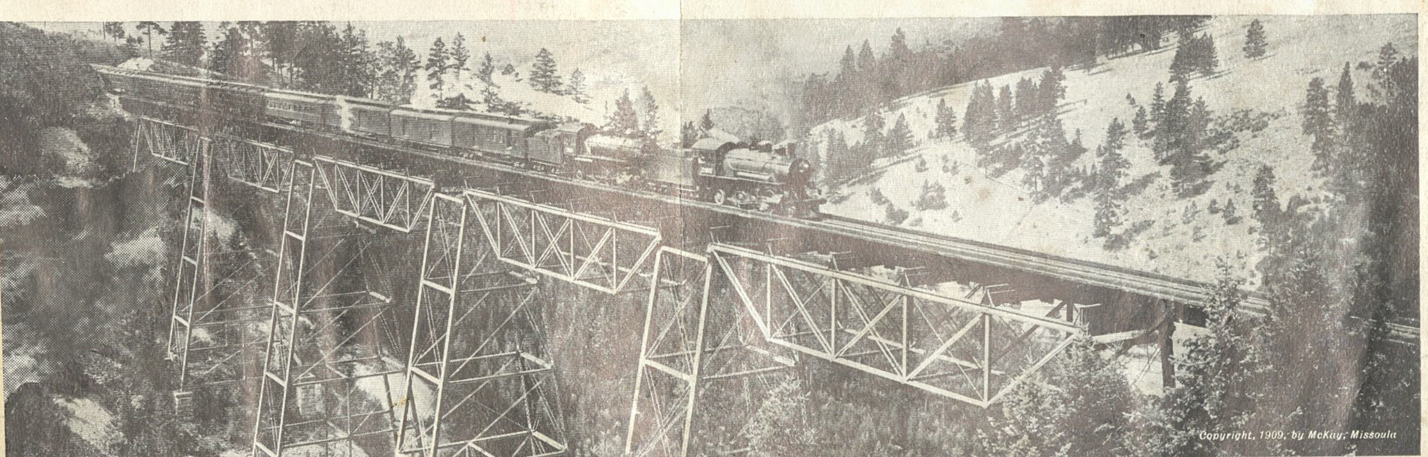
Two hundred twenty-eight feet above stream bed is the *North Coast Limited* as it crosses Marent Trestle, highest on the Northern Pacific system and located 17 miles west of Missoula, Mont. It was midafternoon when the train left Missoula, the bright western sun marking out the beach lines cut by an ancient lake in the high bluffs to the east of the city. For seven miles the limited cruised easily northwest up the broad Clark Fork Valley, but once through De Smet [where the line to Wallace diverges; see page 7, February TRAINS] it turned northward to cross a severe summit into the Jocko Valley. The pass is an old Indian trail, cutting through a narrow opening called Coriacan Defile after Chief Coriacan of the Flathead tribe. It is this same defile which the train crosses a few miles later at Evaro on this highest of NP trestles. The road engine in the photo is No. 2606, a Class A 4-8-4 built by American in 1926, and the lead engine is a helper, Mikado No. 1808, Class W-3 (Brooks, 1917).



W. R. McGee

NORTHERN PACIFIC'S ENGINE 2232 HAULING PASSENGERS OVER MARENT TRESTLE IN MONTANA

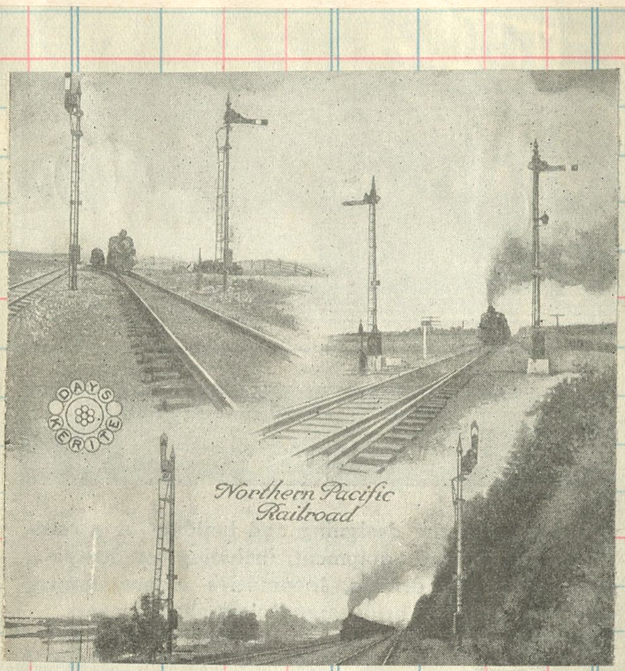
Brother H. C. Wilkins, Div. 262, was at the throttle of the engine shown on the Northern Pacific's highest trestle (228 feet). Engine 1594 was helping the train over the 2.2 grade.

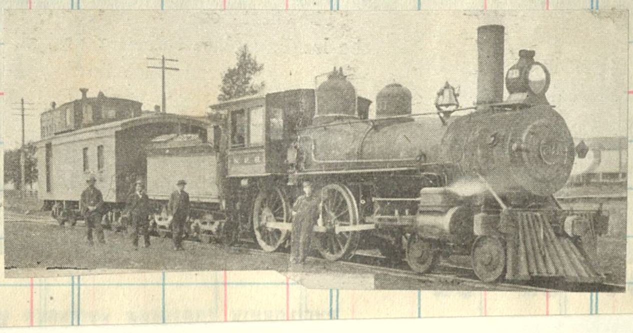


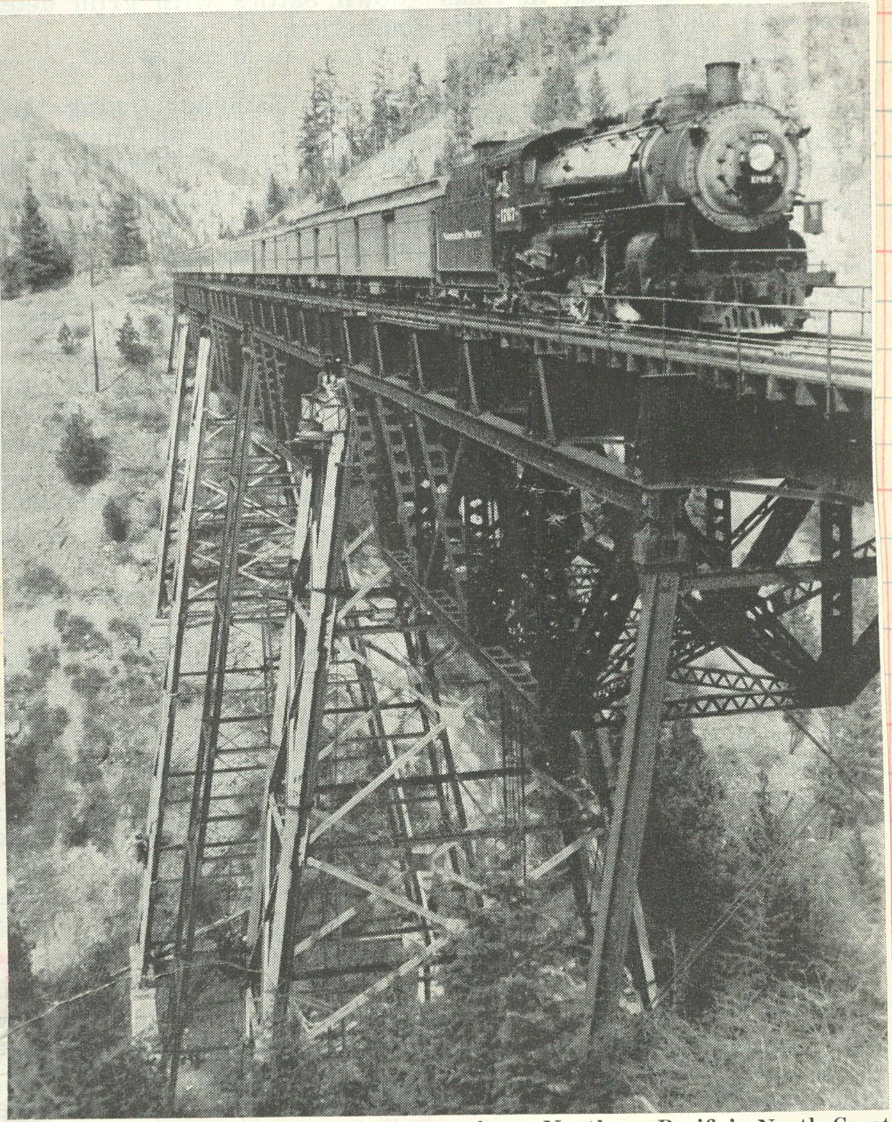
Copyright, 1909, by McKay, Missoula

Marent Trestle, Mont., Northern Pacific Railway

OKM

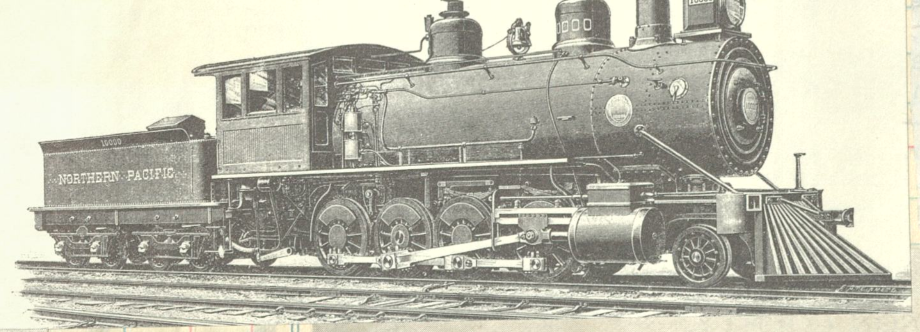


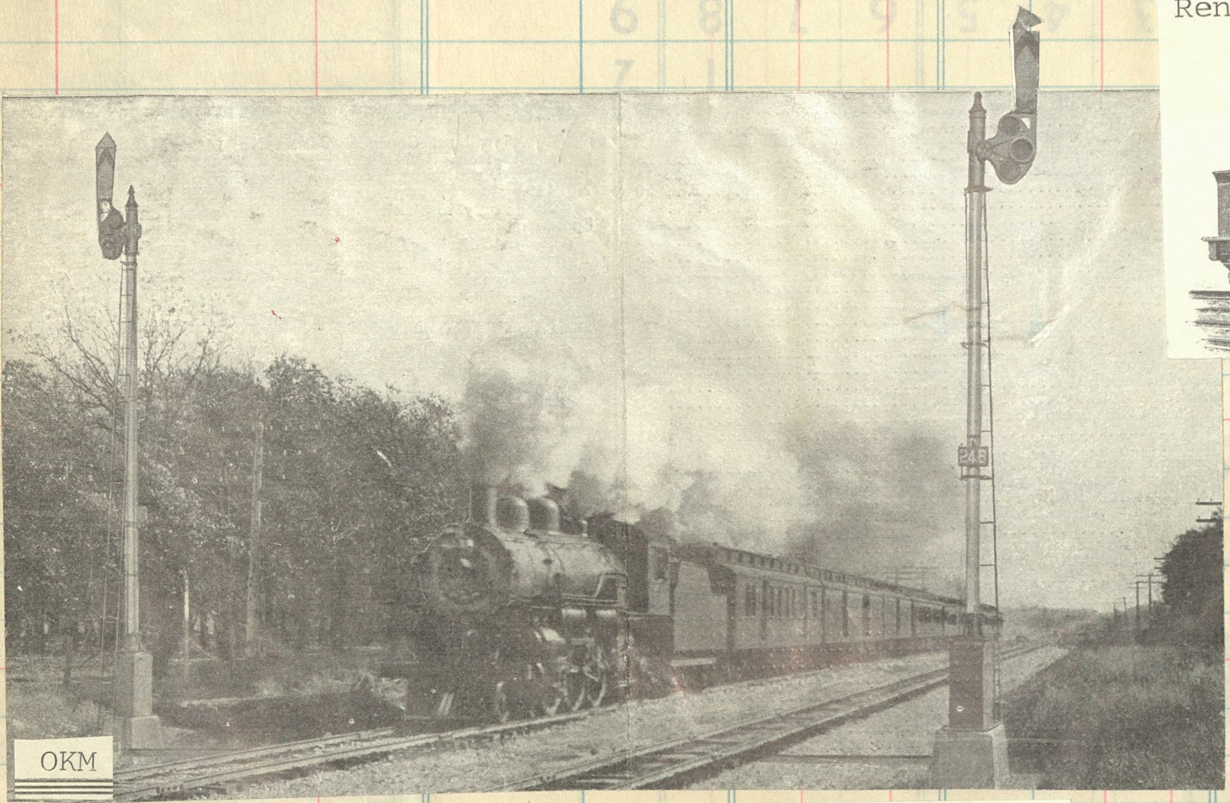




Reminiscent of steam days, this picture shows Northern Pacific's North Coast Limited crossing Marent trestle in western Montana, highest on the N.P., 226 feet. At the time the picture was made, April 4, 1945, the trestle was being strengthened so that the million-pound articulated steamers could be accommodated on the trestle. Unusual in the photo is that a Mikado freight engine is hauling a passenger train.

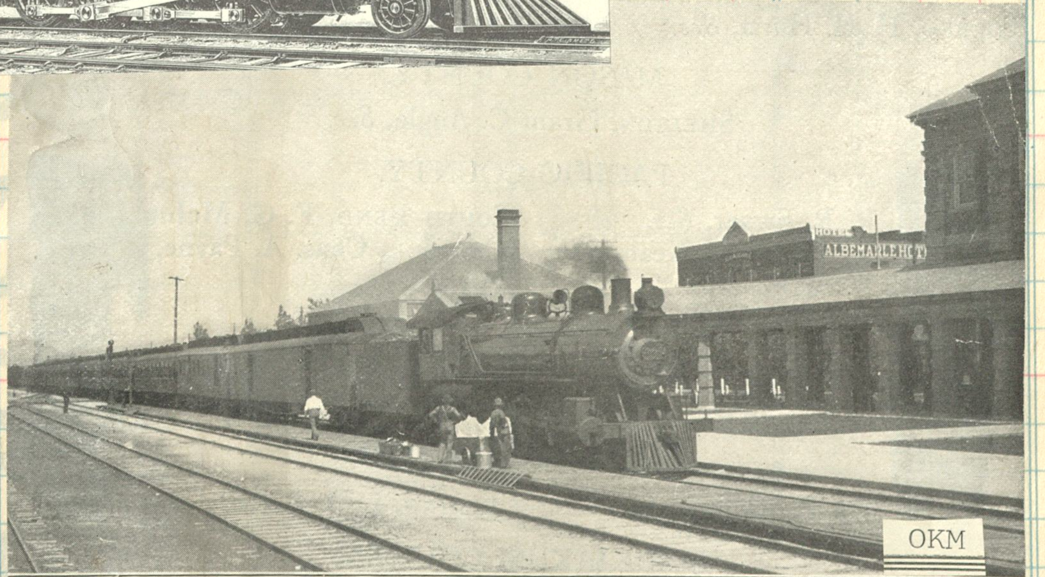
#460 Baldwin 1889 c/n 10000
Renoed 98, 55





OKM

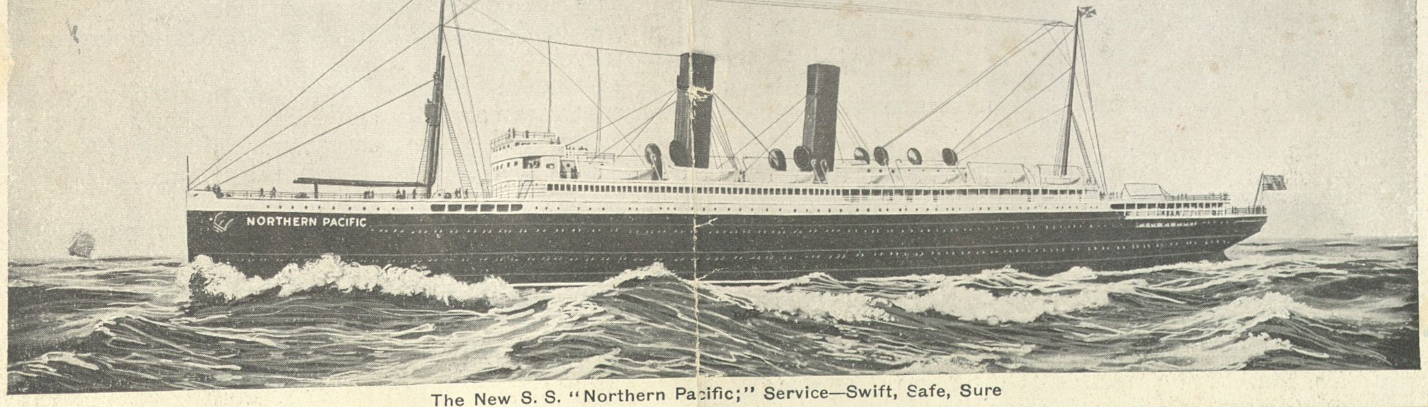
A Q-4 Pacific hurries Trn #1 westward near
St Cloud, Minn. c 1915



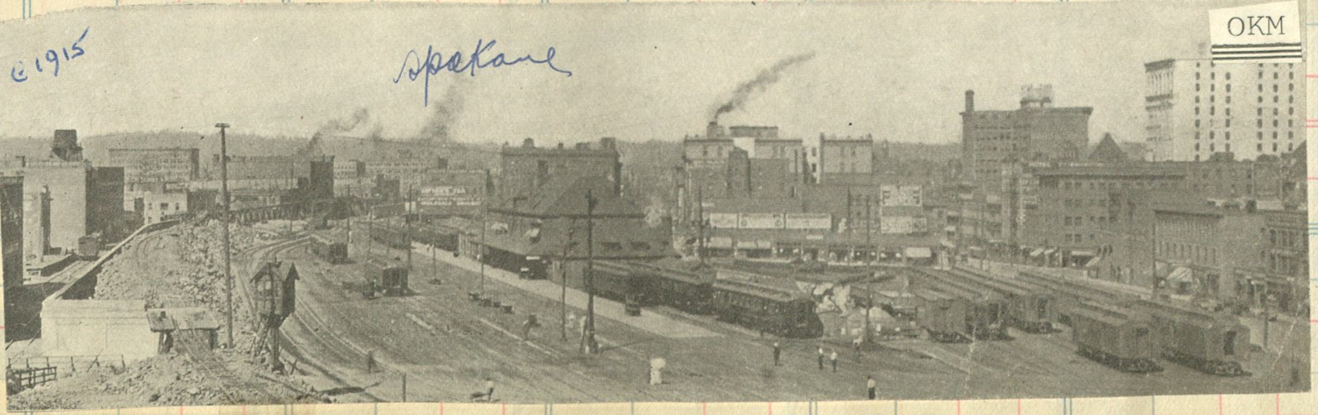
OKM

NORTHERN PACIFIC TRANSCONTINENTAL TRAIN

In U.S. service WWI-destroyed by fire in 1921



The New S. S. "Northern Pacific;" Service—Swift, Safe, Sure

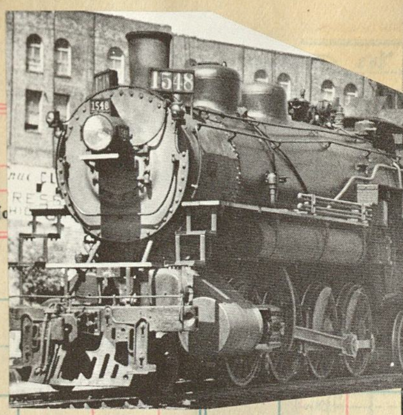


OKM

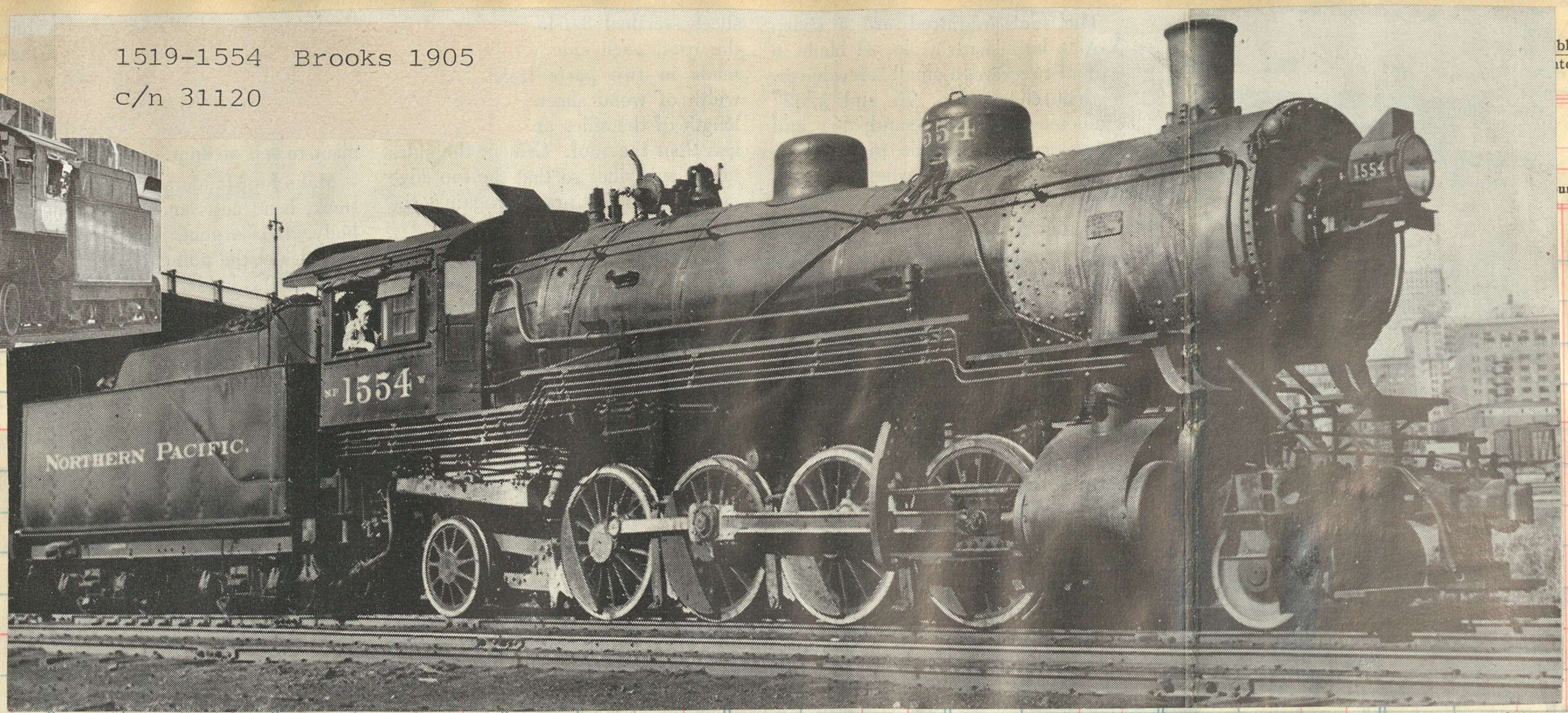
c 1915

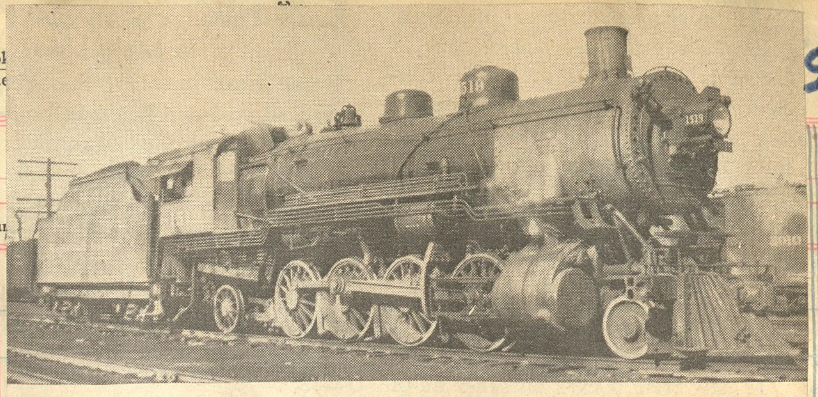
Spokane

93



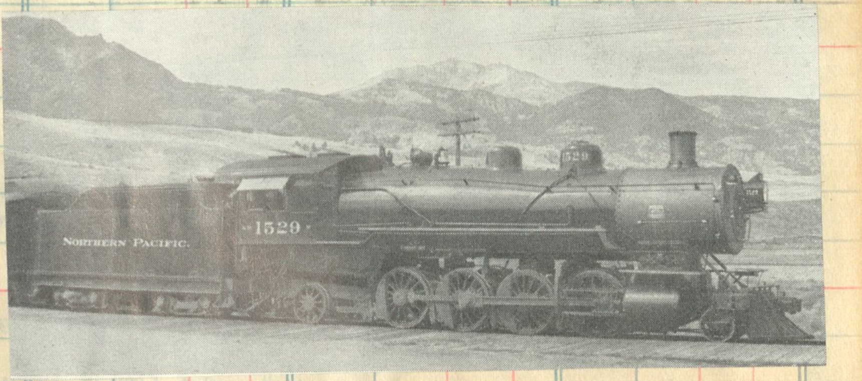
1519-1554 Brooks 1905
c/n 31120

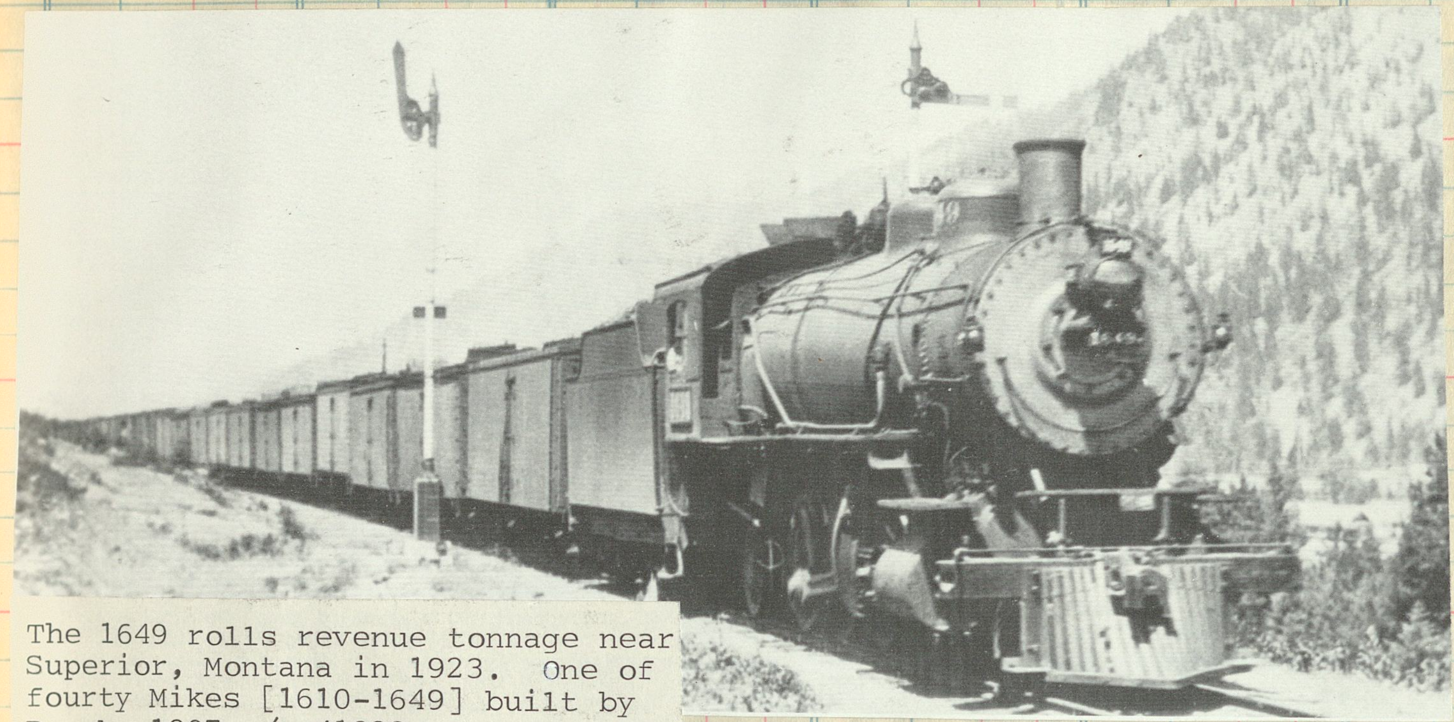




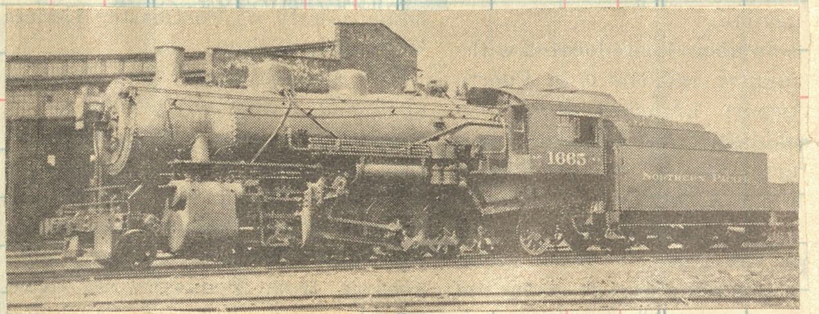
Donald Va

NORTHERN PACIFIC'S ENGINE 1519 AT MANDAN, N. D.

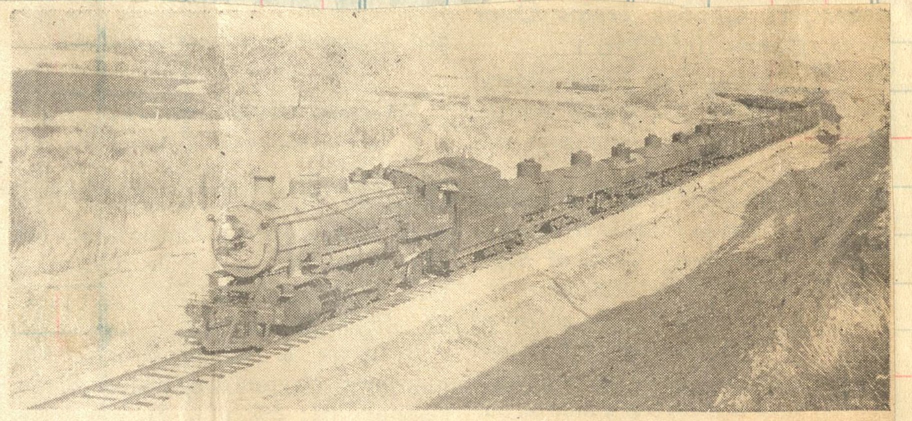




The 1649 rolls revenue tonnage near Superior, Montana in 1923. One of fourty Mikes [1610-1649] built by Brooks 1907-c/n 41923

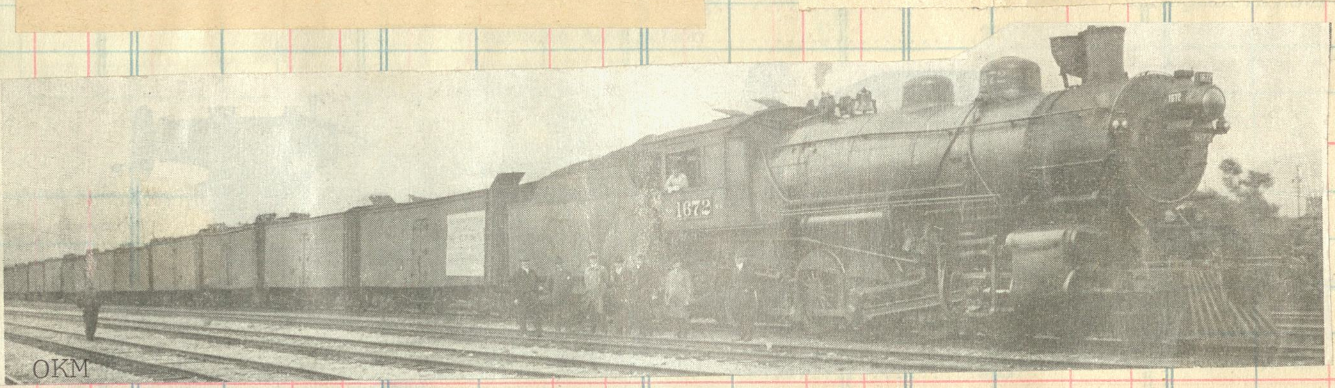


1660-1699 Schenectady 1909



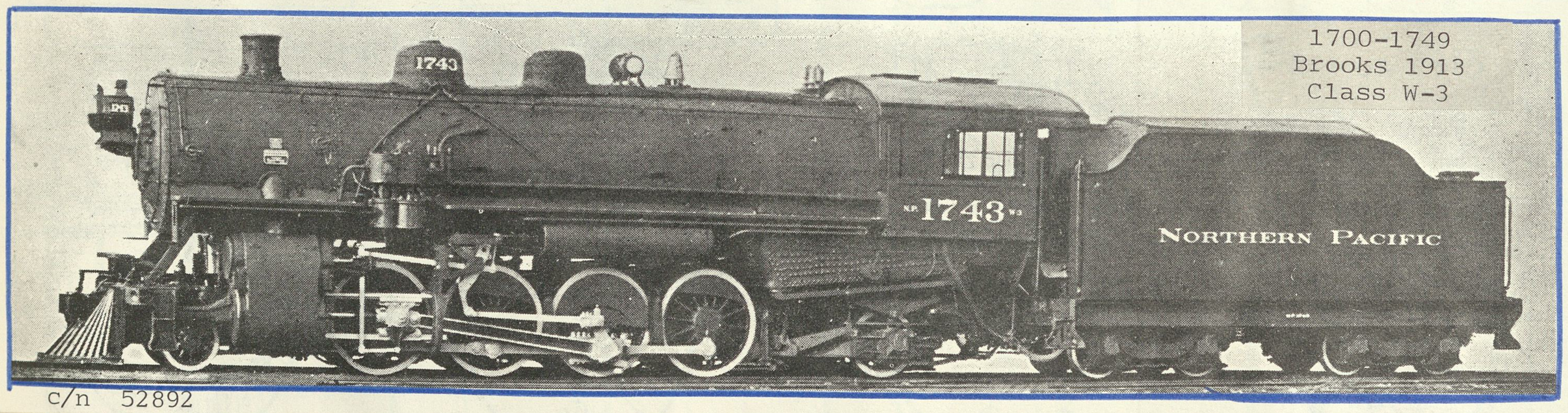
W. R. McGe

NORTHERN PACIFIC'S ENGINE 1530 HAULING FREIGHT NEAR HATHAWAY, MONT

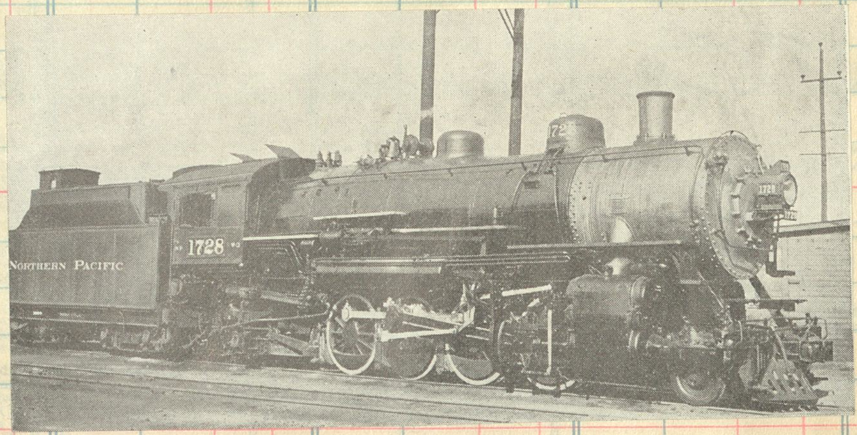


OKM

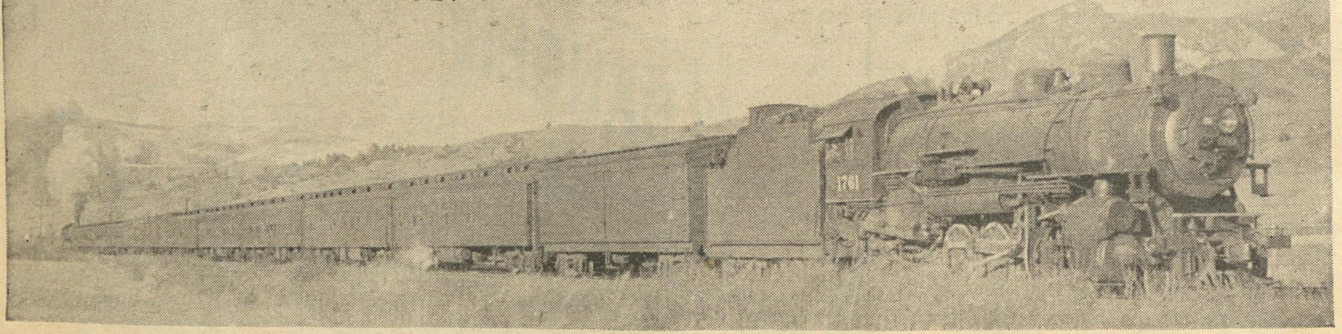
1700-1749
Brooks 1913
Class W-3



c/n 52892



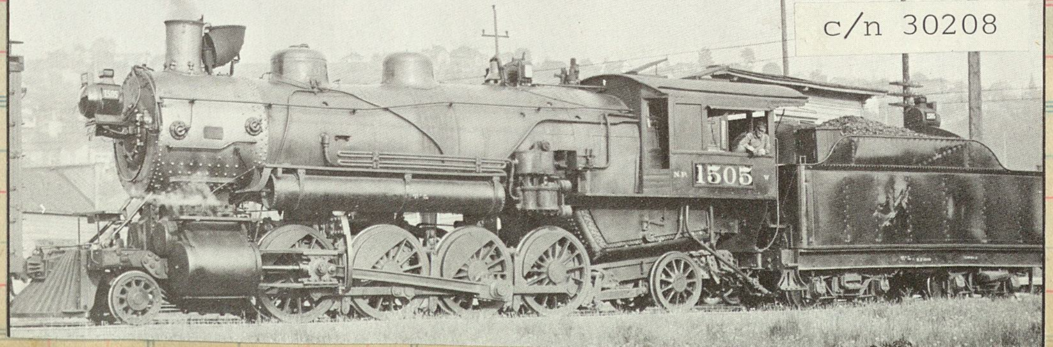
1760-1769 Brooks 1917

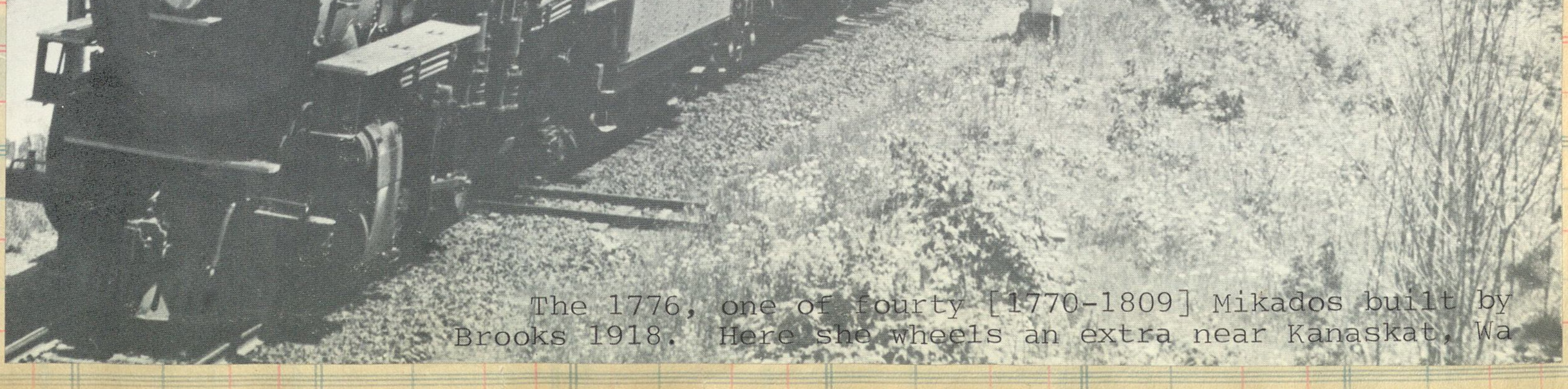


LOADED WITH CCC BOYS

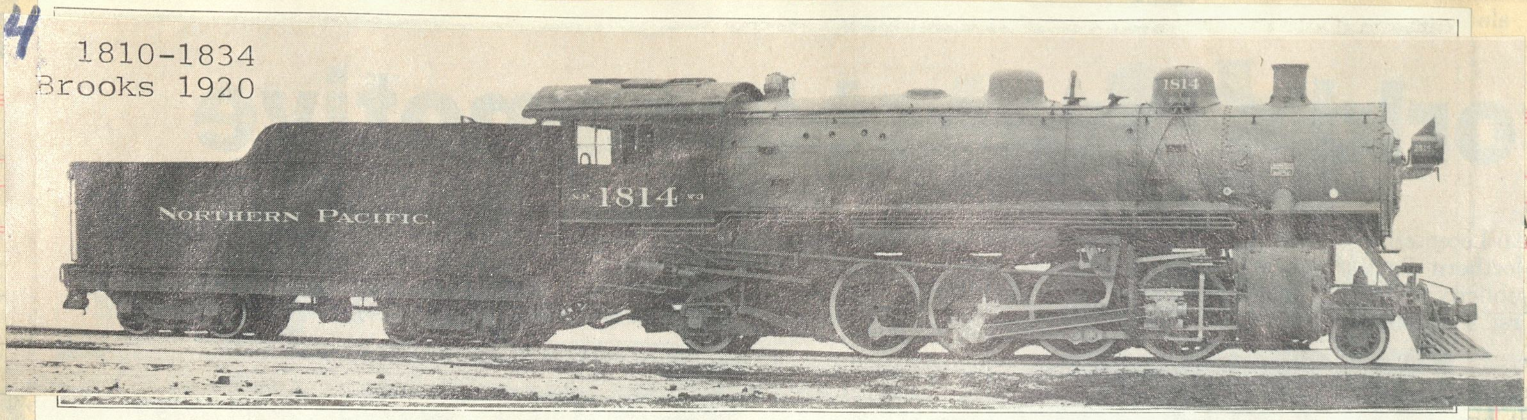
Special train of 12 cars on Northern Pacific pulled by engine 1761 was photographed on Bozeman Hill, five miles east of Bozeman, Mont. Brother Henry Morris, Div. 232, at throttle, and locomotive 1527 helping.

The first Mikes for the Enpee, delivered by Brooks in 1904, noed 1500-1518
c/n 30208





The 1776, one of fourty [1770-1809] Mikados built by Brooks 1918. Here she wheels an extra near Kanaskat, Wa



1810-1834
Brooks 1920

Fig. 52—Mikado (2-8-2) Locomotive for Freight Service. Built for the Northern Pacific by the American Locomotive Company.

c/n 62446

| | | | |
|---|---|---|---|
| Gage | 4 ft. x 8½ in. | Total, Engine and Tender Wheel Base | 70 ft. 11¼ in. |
| Cylinders | 28 x 30 | Heating Surface, Tubes | 2,234 sq. ft. |
| Steam Pressure | 180 lbs. | Heating Surface Firebox | 288 sq. ft. |
| Diameter of Drivers | 63 in. | Heating Surface Flues | 1,030 sq. ft. |
| Tractive Effort | 57,100 lbs. | Heating Surface, Superheater | 874 sq. ft. |
| Rigid Wheel Base | 16 ft. 6 in. | Grate Area | 70.3 sq. ft. |
| Driving Wheel Base | 16 ft. 6 in. | Weight on Drivers | 249,000 lbs. |
| Total, Engine Wheel Base | 35 ft. 3 in. | Fuel | Bituminous Coal |

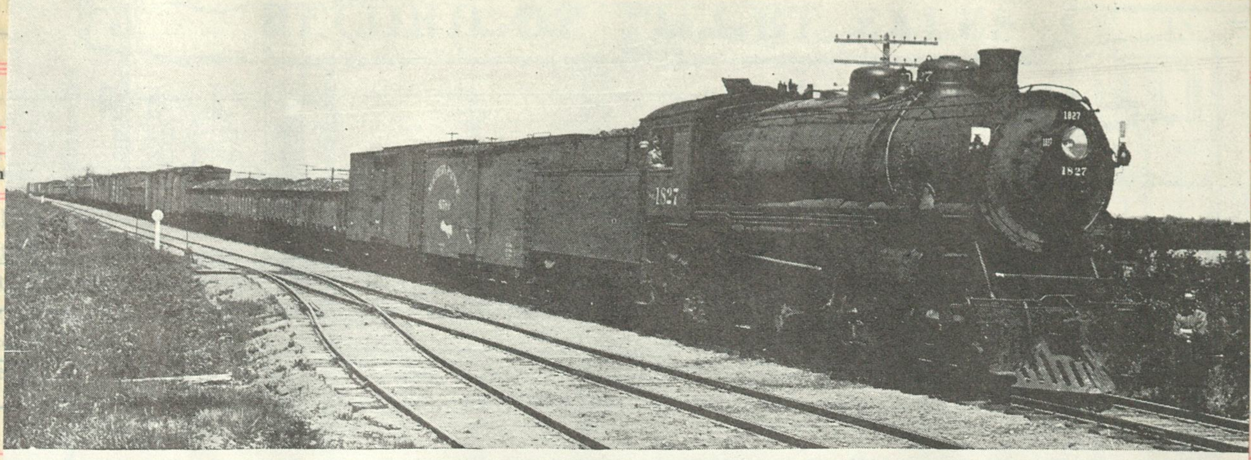
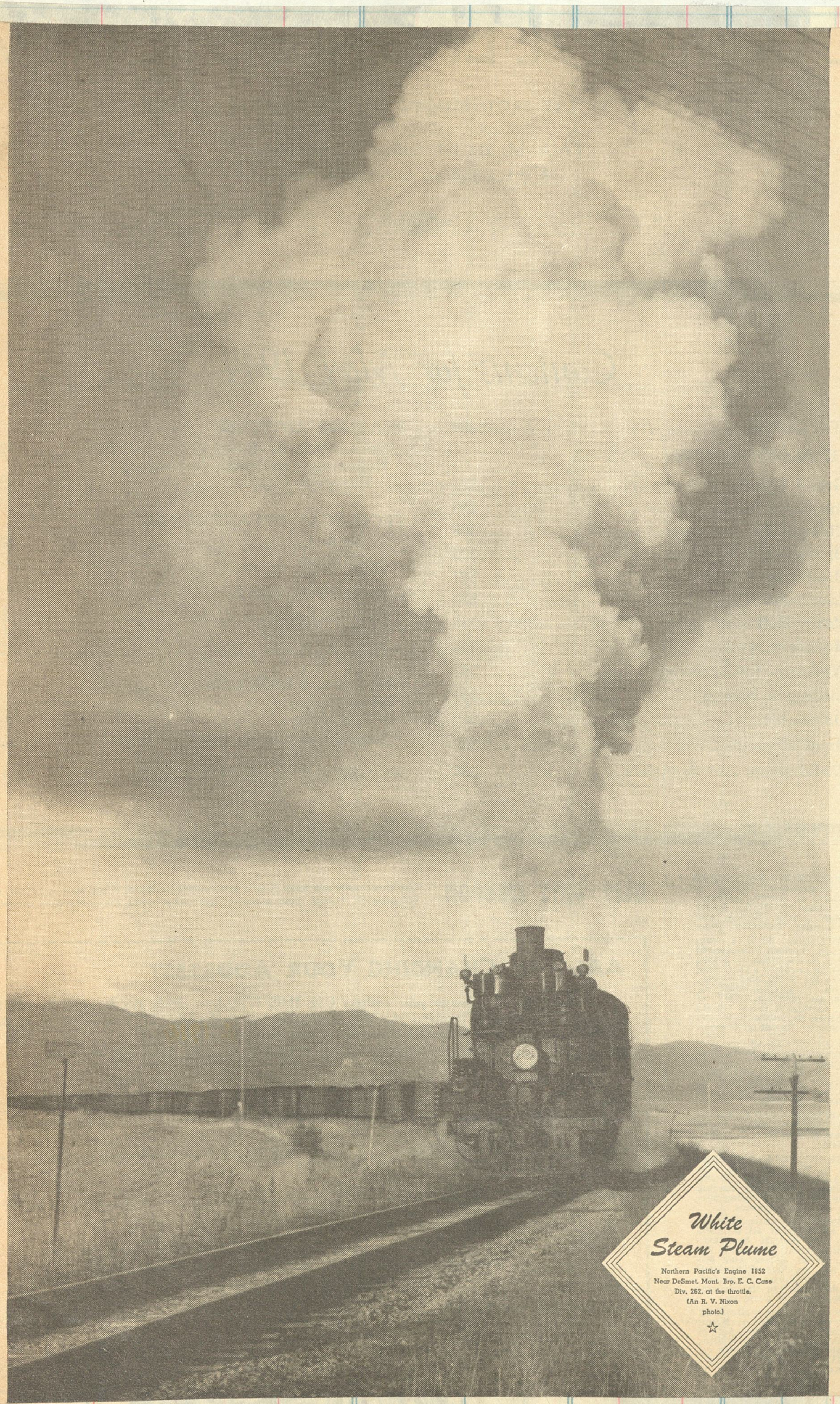


Fig. 55—Northern Pacific Mikado Type Locomotive Hauling a Train of 3,625 Tons and 3,100 Ft. Long

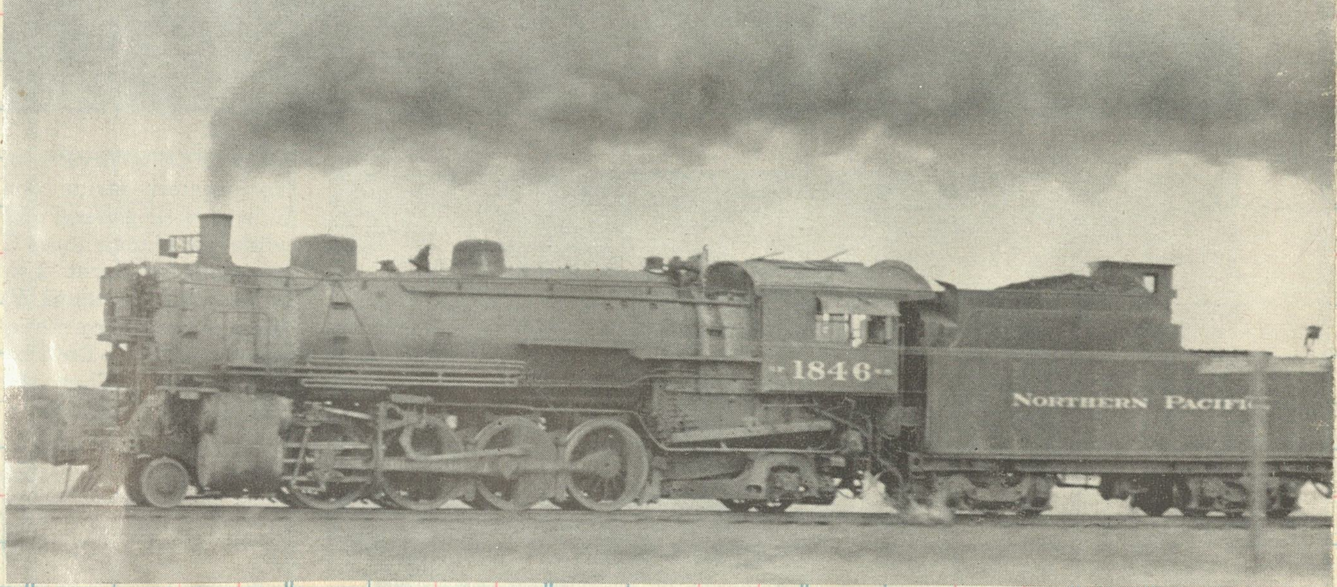
Amount Clos. No. Sold Amount

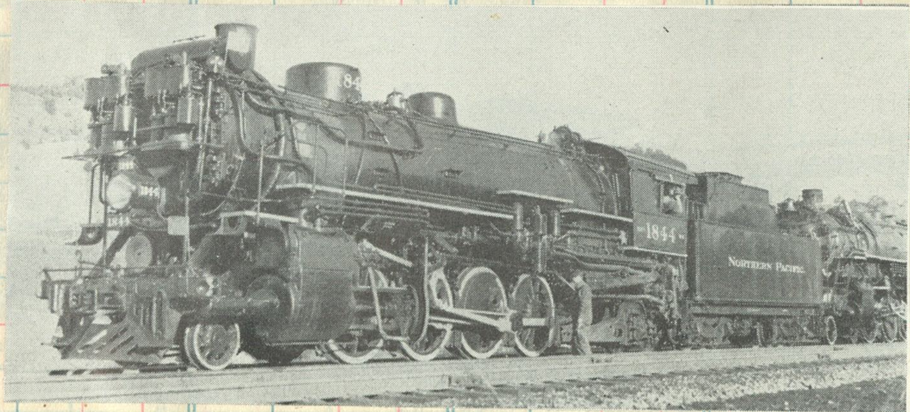


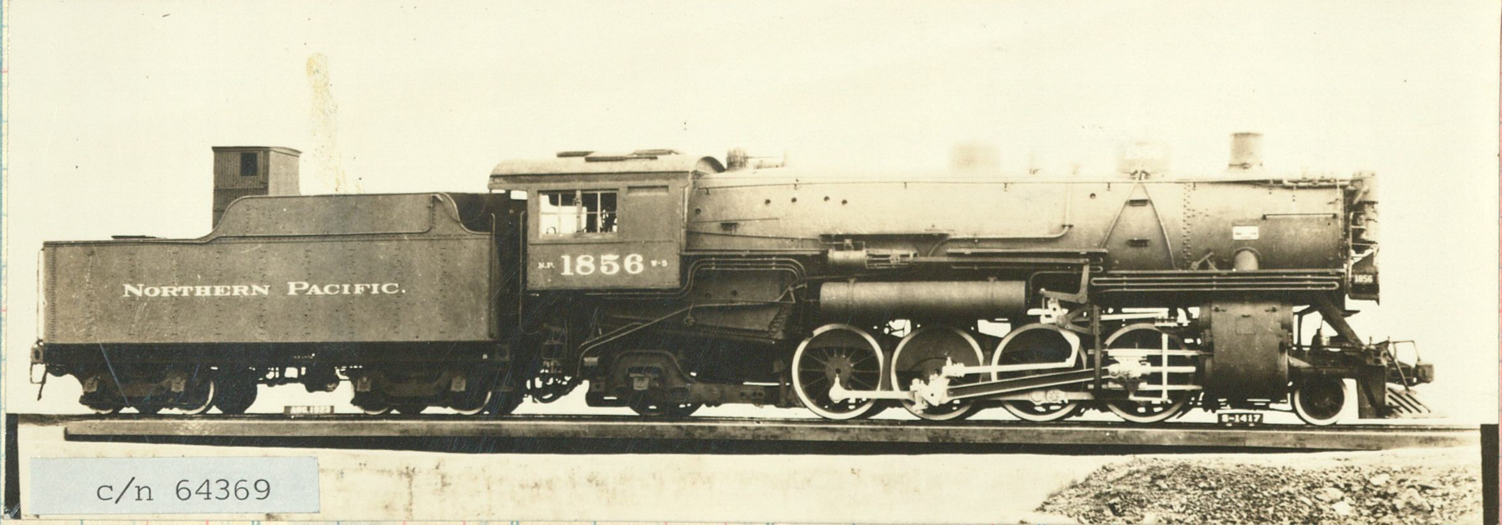
*White Steam Plume*

Northern Pacific's Engine 1852
Near DeSmet, Mont. Bro. E. C. Case
Div. 262, at the throttle.
(An R. V. Nixon
photo.)
☆

An eastbound wheat extra sings along near Pillager, Minnesota







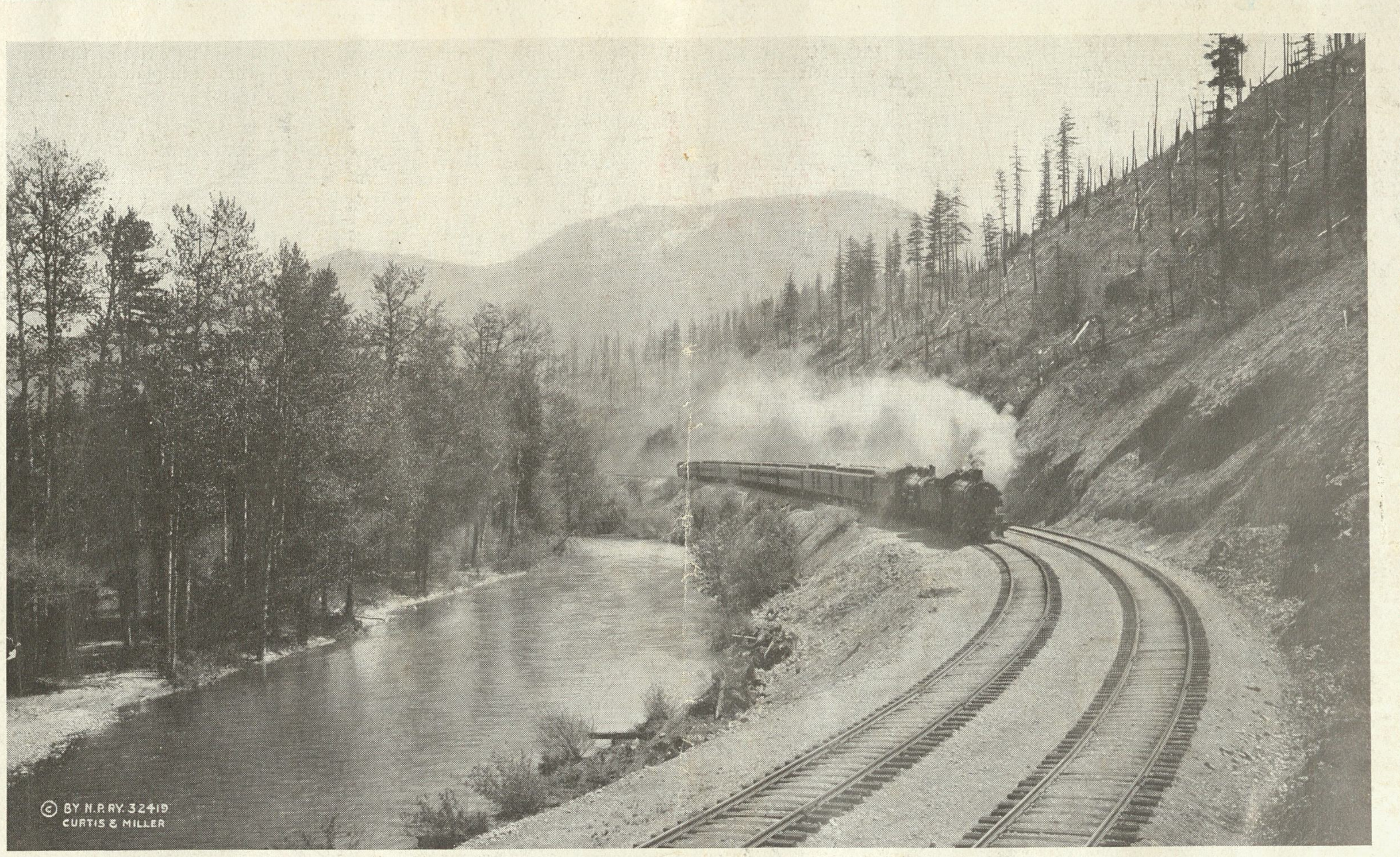
c/n 64369

The W-5 class, the last group of Mikados constructed for the Enpee.
Order covered 25 engines, 1835-1859, delivered by Schenectady 1923.

Total
Add—Error ____________ DATE
Deduct " ____________ DATE
Total
Add Working Fund
Total to be Accounted for
Cash to Agent
Agent's Signature
Cash to next Seller
Next Seller's Signature
Total Accounted for

3-45 1000 bks. (Eureka 461)
Printed in U.S.A.

# NORTH COAST LIMITED



© BY N.P.RY. 32419
CURTIS & MILLER

THE NORTH COAST LIMITED IN THE CASCADE MOUNTAINS

OKM

## EQUIPMENT 1940

### TRAIN No. 1 (Westbound)

**Via C. B. & Q. Chicago to St. Paul-Minneapolis, Nor. Pac. Ry. St. Paul-Minneapolis to Seattle-Tacoma-Portland, via Butte and Spokane. Connections at Staples from Duluth-Superior; at Logan for Helena; at Pasco for Portland.**

**Observation Club Car—Air-Conditioned** (Radio, Barber, Valet, Ladies' Lounge, Buffet, two Shower Baths).

Chicago to Seattle-Tacoma.

Pasco to Portland. (Via S. P. & S.)

**Pullman Standard Sleeping Cars—Air-Conditioned.**

Chicago to Seattle, 10 Section, 1 Compartment, 1 Drawing Room.

Chicago to Seattle, 6 Bedrooms, 6 Sections.

Chicago to Tacoma, 10 Section, 1 Compartment, 1 Drawing Room.

(Car operates via Seattle, leaves Seattle 8:05 a. m. on Train No. 562, arriving Tacoma 9:31 a. m.)

Chicago to Portland, 10 Section, 1 Compartment, 1 Drawing Room (S. P. & S., Pasco to Portland).

Kansas City to Butte, 12 Section, 1 Drawing Room. This car moves on C. B. & Q. No. 43 Kansas City to Billings, thence train No. 3 to Butte. Through sleeping car passengers are privileged to remain in this car at Butte until arrival of train No. 1.

For Yellowstone Park Service, see page 8.

**Pullman Tourist Sleeping Cars—Air-Conditioned:—**

Chicago to Seattle-Tacoma, 16 Section.

**Dining Car—Air-Conditioned:—**

Chicago to Seattle-Tacoma.
(A la carte service; also club breakfasts, 50c to $1.00. Special plate luncheons and dinners, 50c and casserole service, 75c. Table d'hote luncheon, $1.00. Table d'hote dinner, $1.25. Tray service at popular prices in coaches and tourist cars.

**Coach—New, De Luxe Air-Conditioned.**

Form-fitting reclining chairs, diffused lighting, ladies' lounge and dressing rooms, men's lounge.

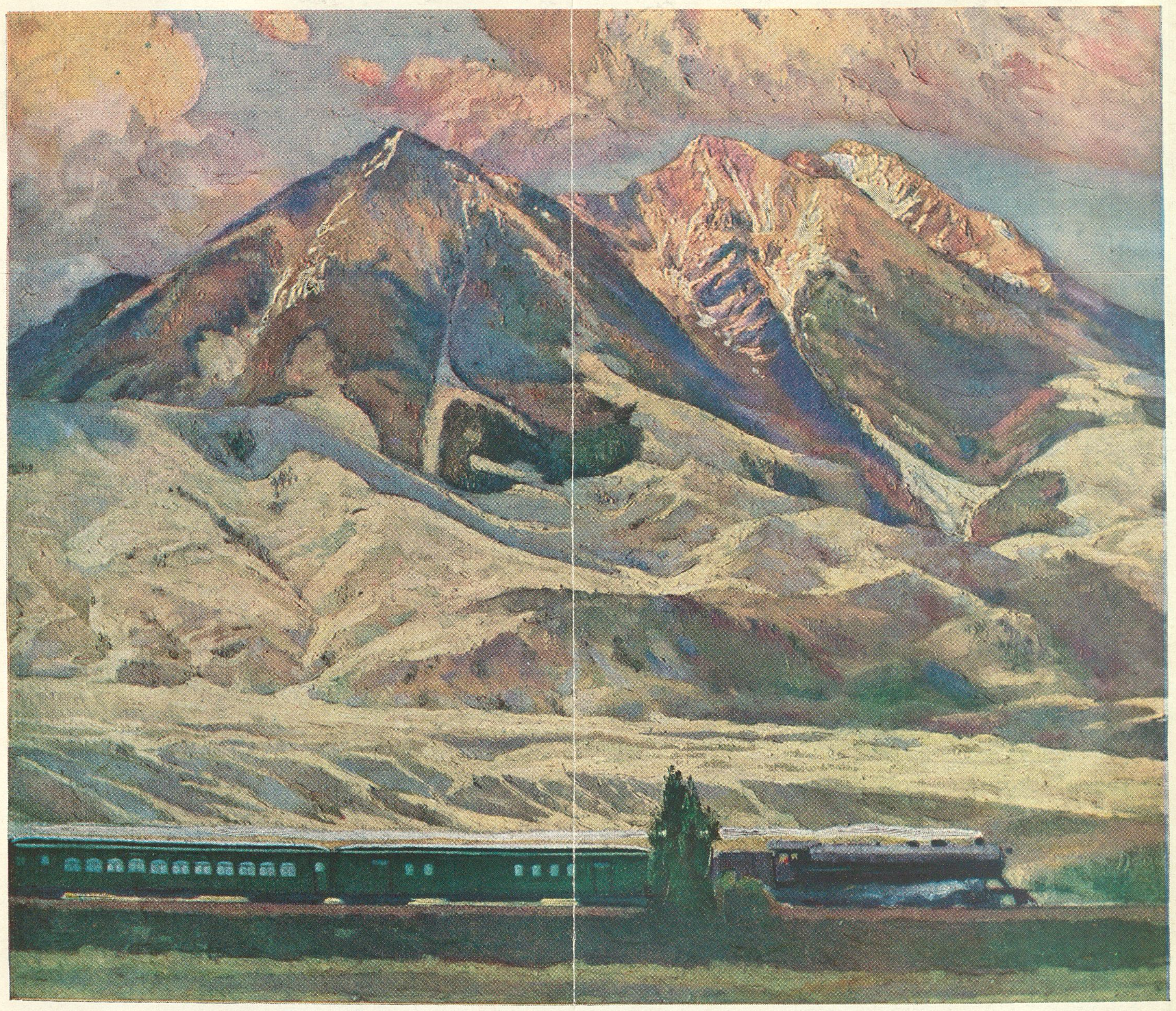
Chicago to Seattle.

Chicago to Portland. (Via N. P. Ry. to Pasco and S. P. & S.)

Duluth to Staples (Train 55).

Logan to Helena.

At Chicago, sleeping cars are ready for occupancy at 9.00 p. m.



**Emigrant Peak in the Absaroka Range of the Rockies on the way to Yellowstone**

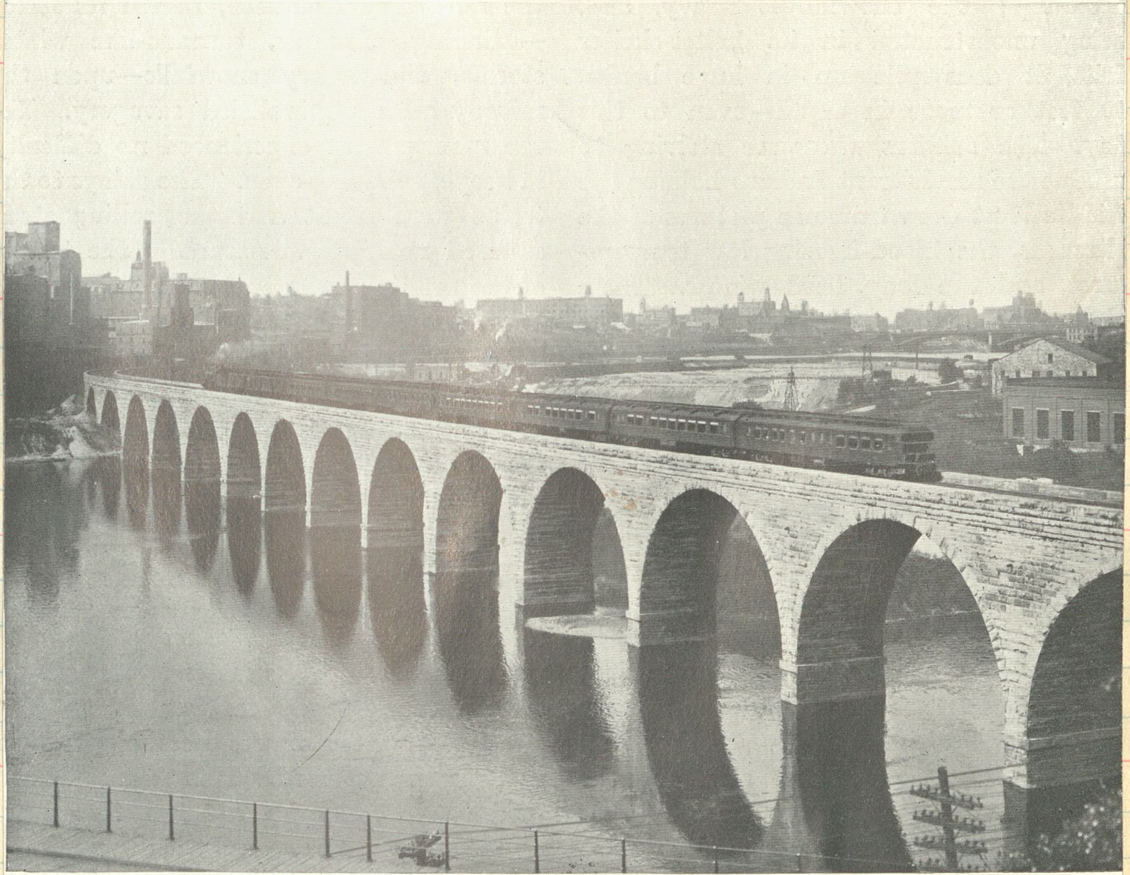
FULL enjoyment is naturally what you want in your Yellowstone trip. Here is how to get it: Go Burlington-Northern Pacific on the air-conditioned North Coast Limited. By doing this you can readily arrange your trip in one gateway and out another and obtain more sight-seeing.

On the way you'll have delicious dining car meals, restful berths, observation-club service with barber and beauty shop, shower baths, soda bar, radio, writing desk, easy chairs, reading and card room.

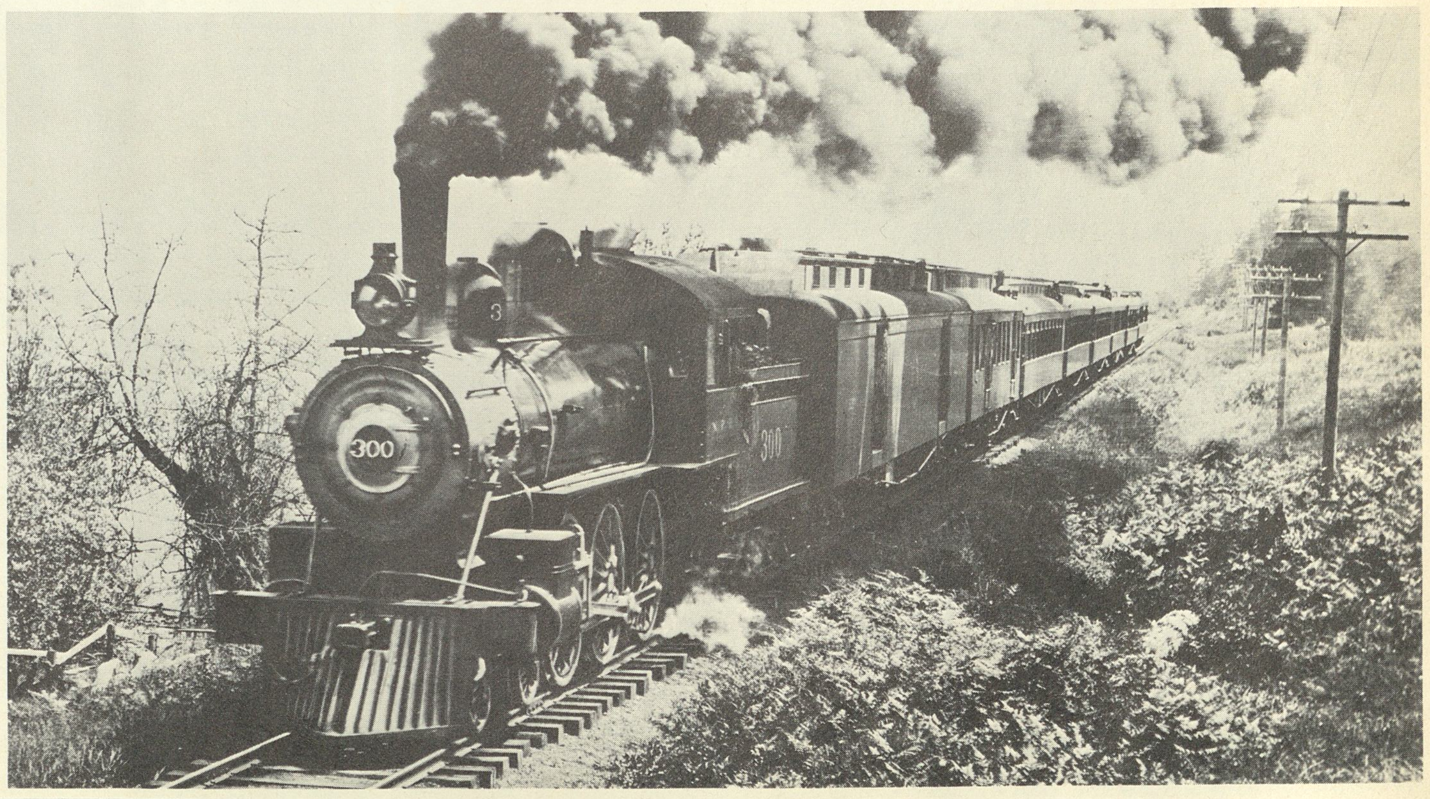
You'll like the North Coast Limited . . . its courteous staff and the congenial sociability of western vacation travelers all having a good time.

BETTER YELLOWSTONE VACATIONS

THE NORTH COAST LIMITED WAY



THE NORTH COAST "LIMITED" CROSSING THE BRIDGE SPANNING THE MISSISSIPPI RIVER, WHICH DIVIDES THE TWIN CITIES OF ST. PAUL AND MINNEAPOLIS. c 1910

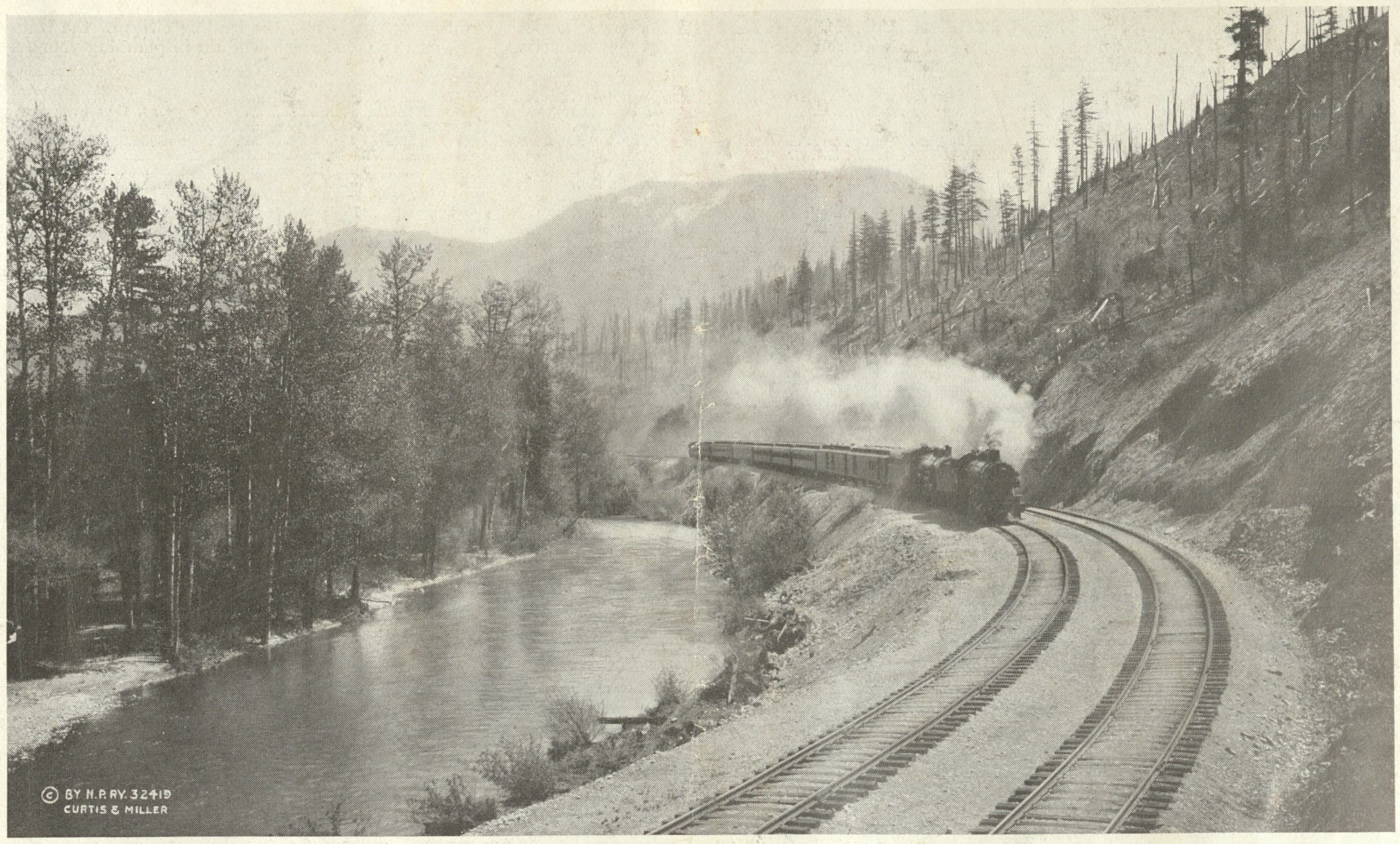


**NORTH COAST LIMITED.** Northern Pacific's ten-wheeler 300 drapes coal smoke over bracken fern near Goble, Oregon, shortly after fast flyer was first inaugurated in ~~the~~ [illegible]s. (Courtesy of Northern Pacific Ry.)

NORTH COAST LIMITED

Inaugurated April 29, 1900 as Nos 1 & 2. Operated only during the summer season but in 1902 was put on a daily year around schedule.

3-45 1000 bks. (Eureka 461)
Printed in U.S.A.



THE NORTH COAST LIMITED IN THE CASCADE MOUNTAINS

OKM

# NORTH COAST LIMITED

1940

## EQUIPMENT

### TRAIN No. 1 (Westbound)

**Via C. B. & Q. Chicago to St. Paul-Minneapolis, Nor. Pac. Ry. St. Paul-Minneapolis to Seattle-Tacoma-Portland, via Butte and Spokane. Connections at Staples from Duluth-Superior; at Logan for Helena; at Pasco for Portland.**

**Observation Club Car—Air-Conditioned** (Radio, Barber, Valet, Ladies' Lounge, Buffet, two Shower Baths).

Chicago to Seattle-Tacoma.

Pasco to Portland. (Via S. P. & S.)

**Pullman Standard Sleeping Cars—Air-Conditioned.**

Chicago to Seattle, 10 Section, 1 Compartment, 1 Drawing Room.

Chicago to Seattle, 6 Bedrooms, 6 Sections.

Chicago to Tacoma, 10 Section, 1 Compartment, 1 Drawing Room.

(Car operates via Seattle, leaves Seattle 8:05 a. m. on Train No. 562, arriving Tacoma 9:31 a. m.)

Chicago to Portland, 10 Section, 1 Compartment, 1 Drawing Room (S. P. & S., Pasco to Portland).

Kansas City to Butte, 12 Section, 1 Drawing Room. This car moves on C. B. & Q. No. 43 Kansas City to Billings, thence train No. 3 to Butte. Through sleeping car passengers are privileged to remain in this car at Butte until arrival of train No. 1.

For Yellowstone Park Service, see page 8.

**Pullman Tourist Sleeping Cars—Air-Conditioned:—**

Chicago to Seattle-Tacoma, 16 Section.

**Dining Car—Air-Conditioned:—**

Chicago to Seattle-Tacoma.

(A la carte service; also club breakfasts, 50c to $1.00. Special plate luncheons and dinners, 50c and casserole service, 75c. Table d'hote luncheon, $1.00. Table d'hote dinner, $1.25. Tray service at popular prices in coaches and tourist cars.

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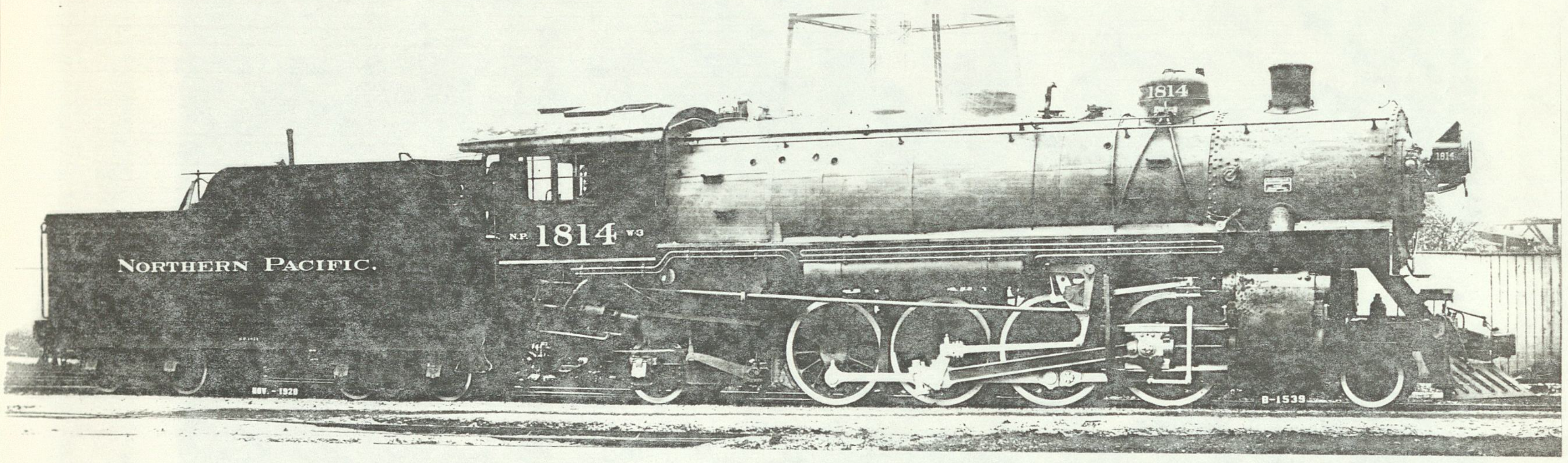
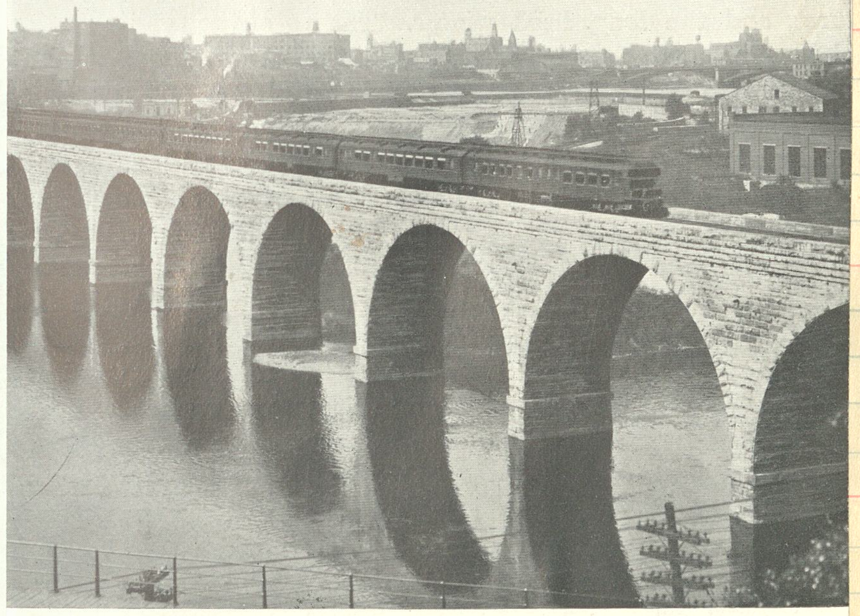
Logan to Helena.

At Chicago, sleeping cars are ready for occupancy at 9.00 p. m.

Wyo 11/13





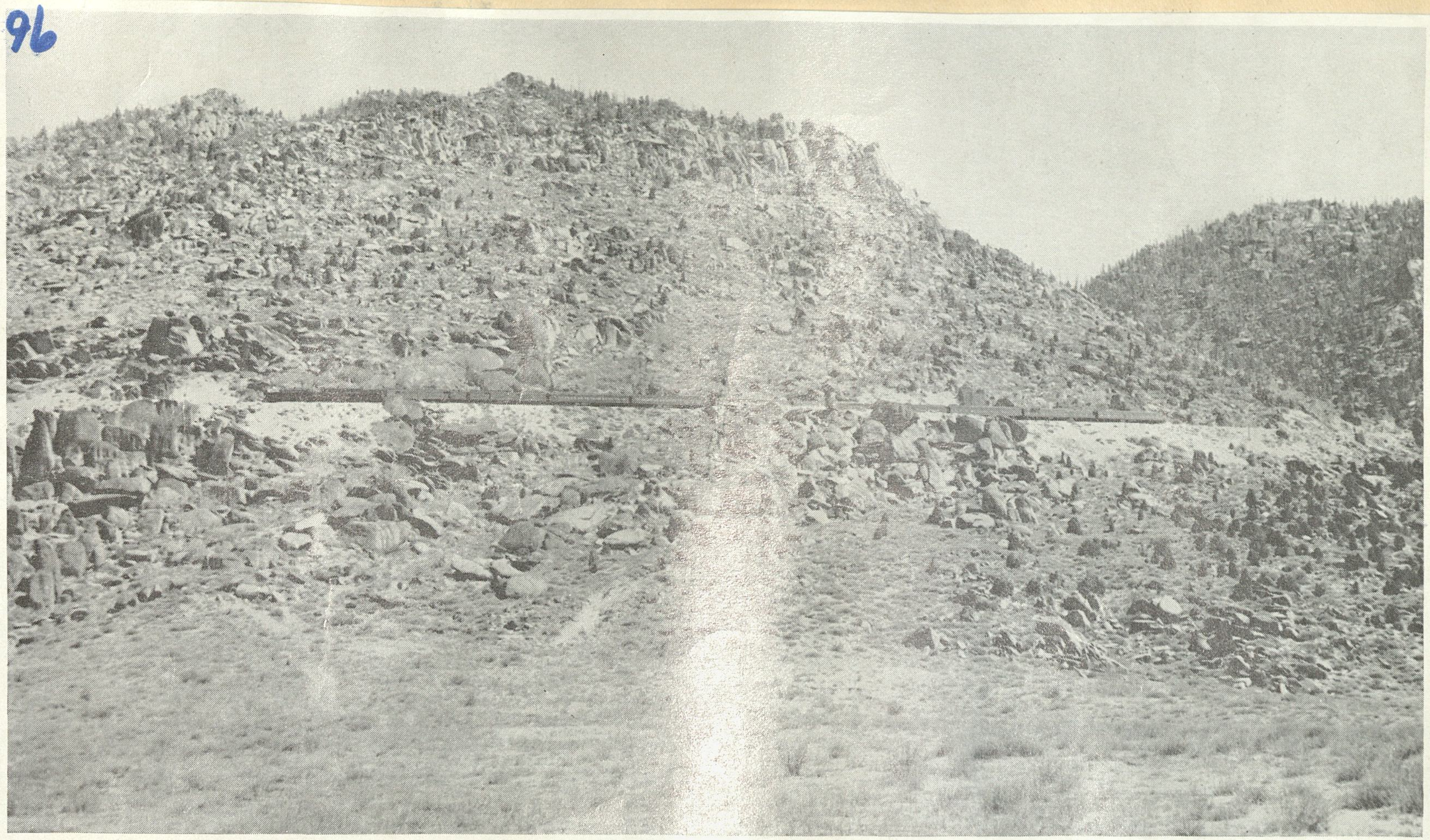
"LIMITED" CROSSING THE BRIDGE SPANNING THE MISSISSIPPI RIVER, VIDES THE TWIN CITIES OF ST. PAUL AND MINNEAPOLIS. C 1910

**NORTH COAST LIMITED.** Northern Pacific's ten-wheeler 300 drapes coal smoke over bracken fern near Goble, Oregon, shortly after fast flyer was first inaugurated in [redacted]s. (Courtesy of Northern Pacific Ry.)

## THE NORTH COAST LIMITED WAY

NORTH
COAST
LIMITED

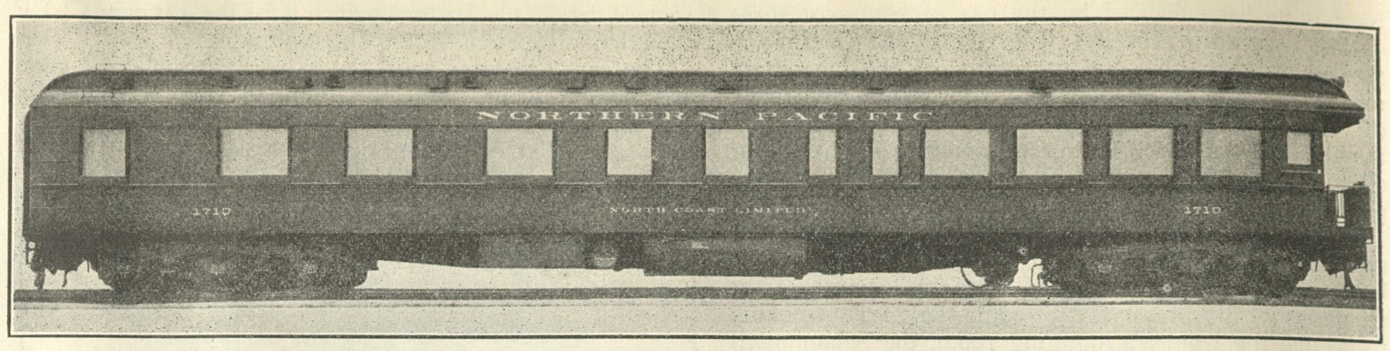
Inaugurated April 29, 1900 as Nos 1 & 2. Operated only during the summer season but in 1902 was put on a daily year around schedule.



R. V. Nixon, Box 101, Livingston, Mont.

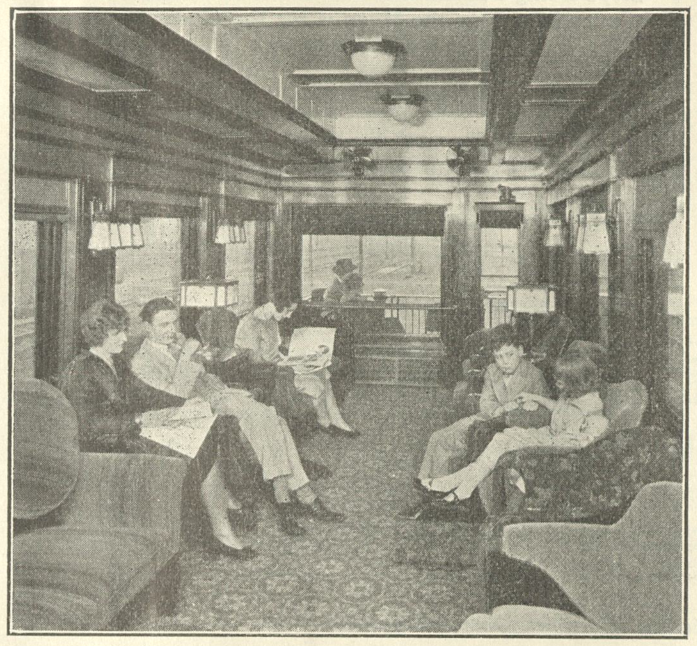
*North Coast Limited* near Butte.

Strung out along a mountainside strewn with rocks that make the 10 cars and Locomotive 2650 look like toys is the Northern Pacific's *North Coast Limited*, descending the 2.2 per cent westbound grade from the Continental Divide into Butte, Mont. The rock formation is volcanic.

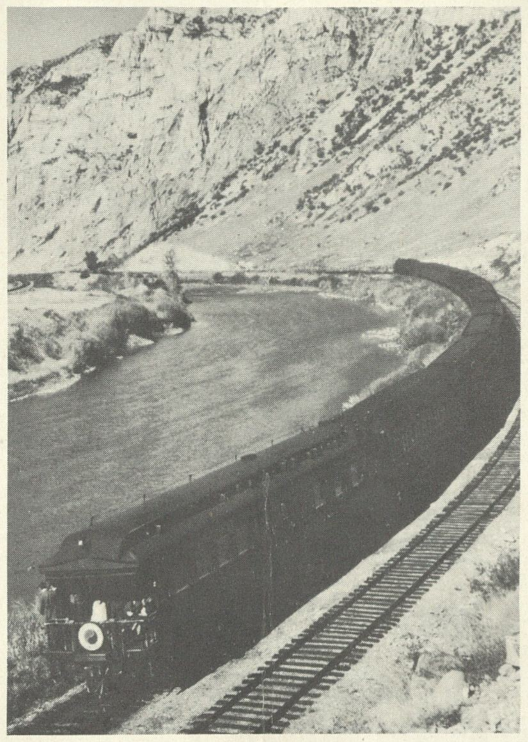


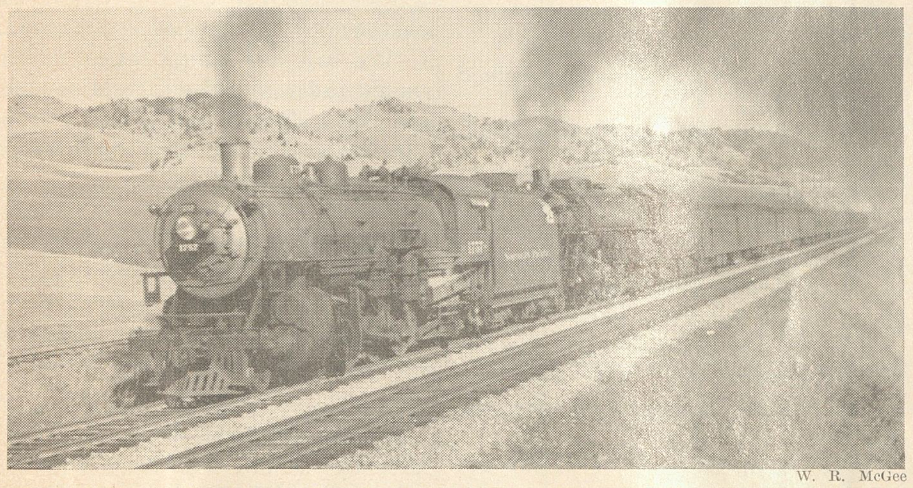
*New Northern Pacific Observation-Club Car for the North Coast Limited*

10 BLT BY PULLMAN 1926



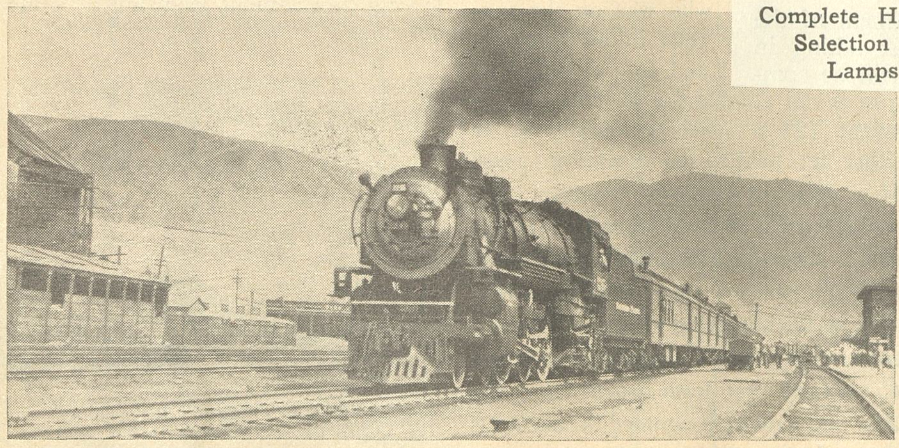
**Complete Harmony of Decorative Details, Variety in the Selection of Furniture and the Use of Table Reading Lamps Give Character to this Observation Room**





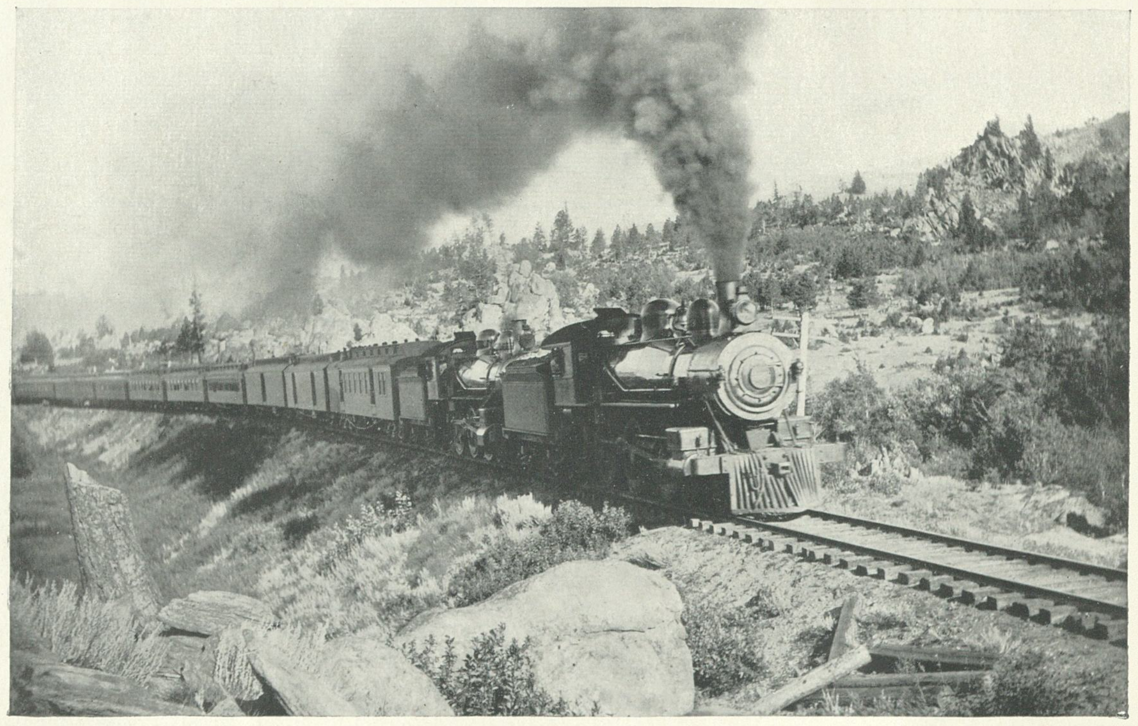
W. R. McGee

NORTHERN PACIFIC'S ENGINES 1757 AND 2652 HAULING "NORTH COAST LIMITED" UP STEEP GRADE



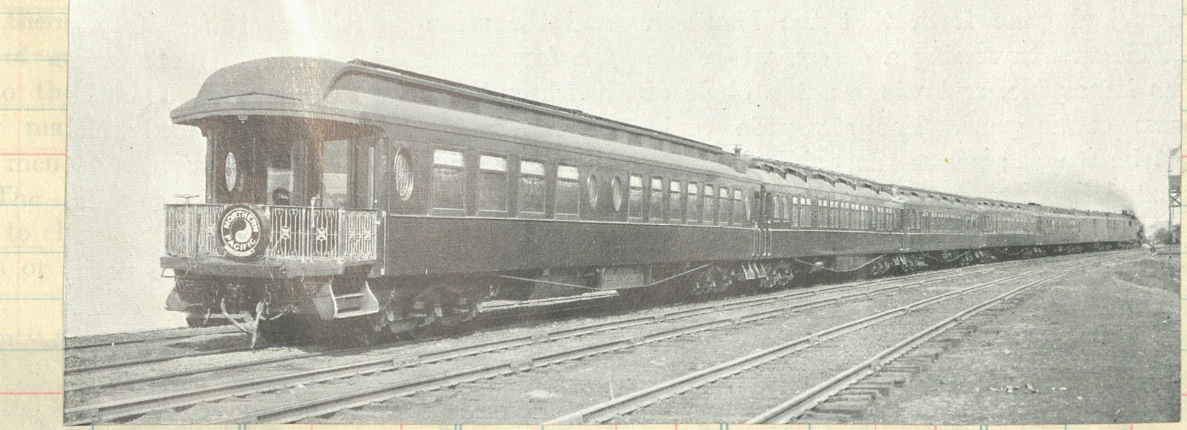
Allston Railroad Photographs

NORTHERN PACIFIC'S ENGINE 2245 "THE NORTH COAST LIMITED" MAKING STATION STOP AT MISSOULA, MONT.

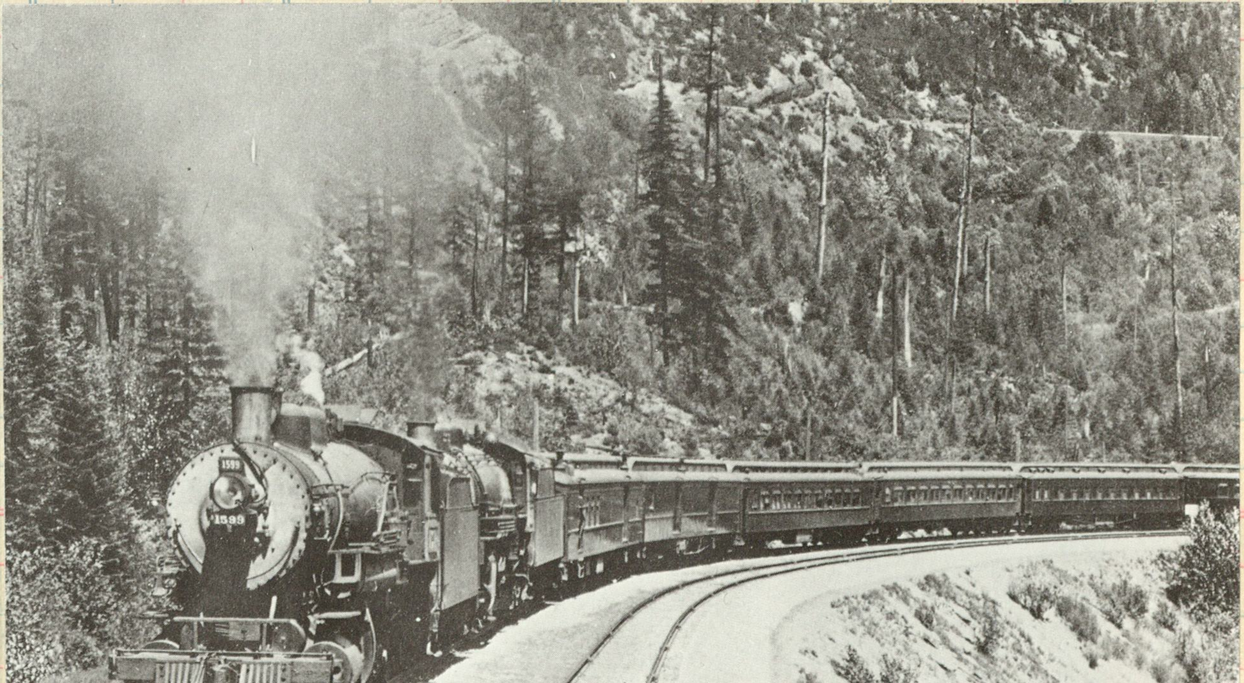


THE NORTHERN PACIFIC TRANSCONTINENTAL EXPRESS CLIMBING THE 116 FEET PER MILE GRADE THROUGH THE ROCKIES WITH A "DOUBLE-HEADER."

1909 issue of the North Coast Limited headed by 2162



#2 drifting into Missoula

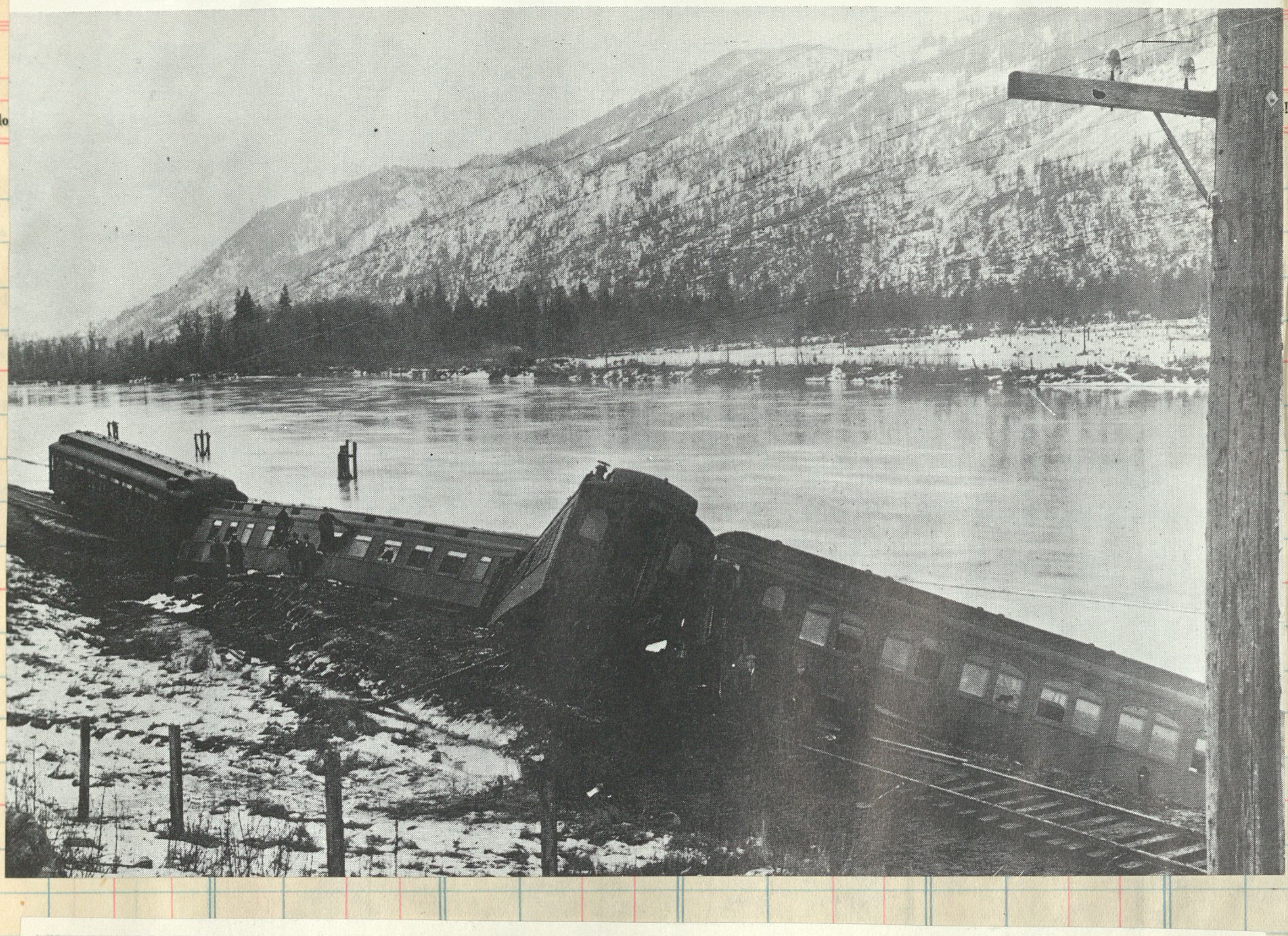


Two hard working engines lift the North Coast Limited up the west side of the Cascades to Stampede.

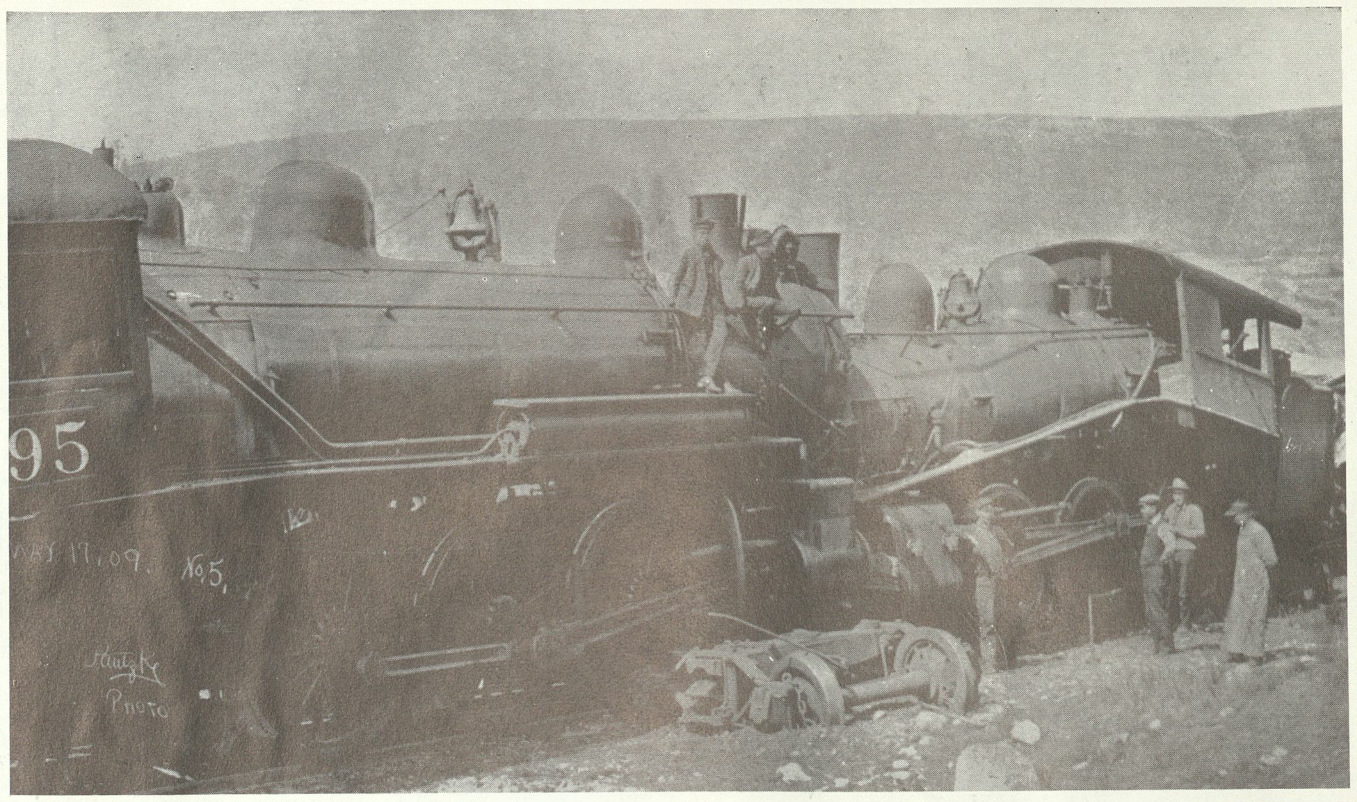
1599a 2260 (1924)

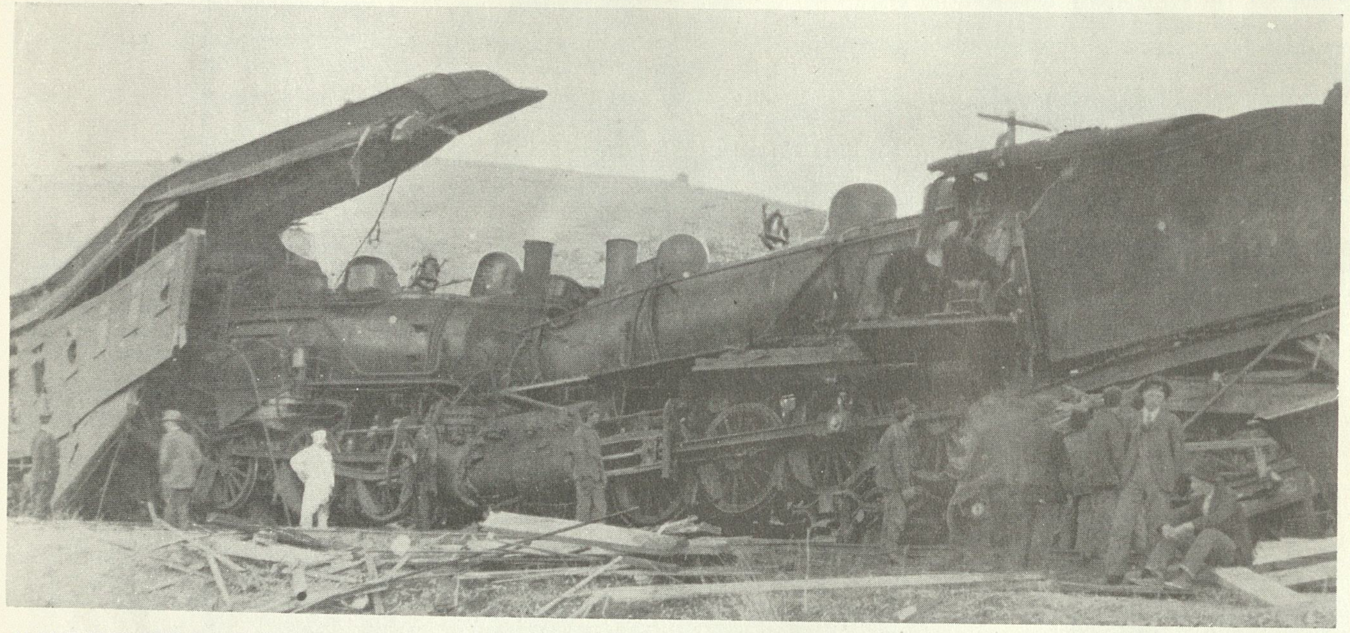
**SPRING THAWS** were a constant hazard to railroads. The melting snow in the Rockies near Eddy, Montana washed out the tracks of the Northern Pacific Railroad, sending the coaches tumbling down the river bank.

*Collection of the Library of Congress*

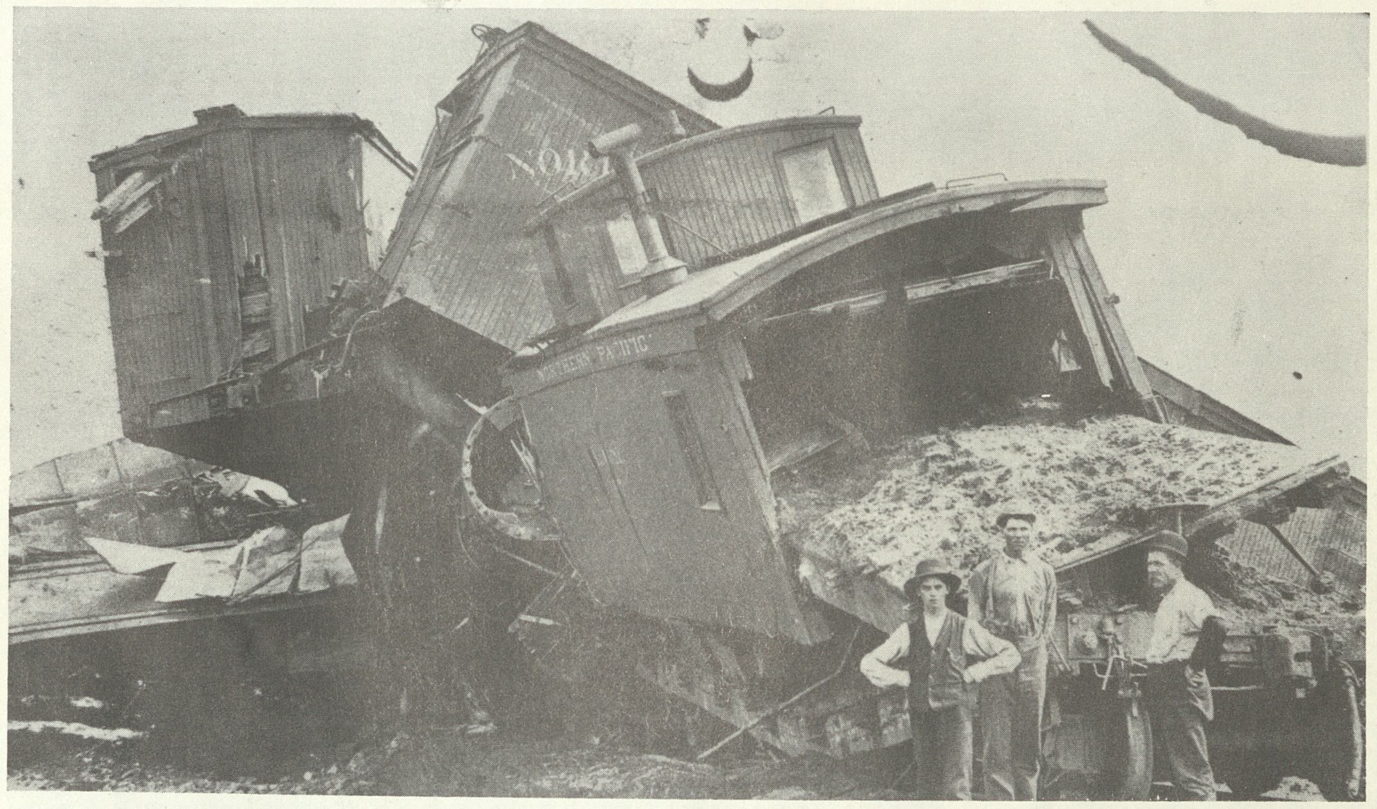


**DISPUTED PASSAGE.** Engines 295 and 240 of the Northern Pacific locked horns in this head-on collision in Eastern Washington on May 17, 1909. The accident occurred near Ellensburg (Pautzke photo)



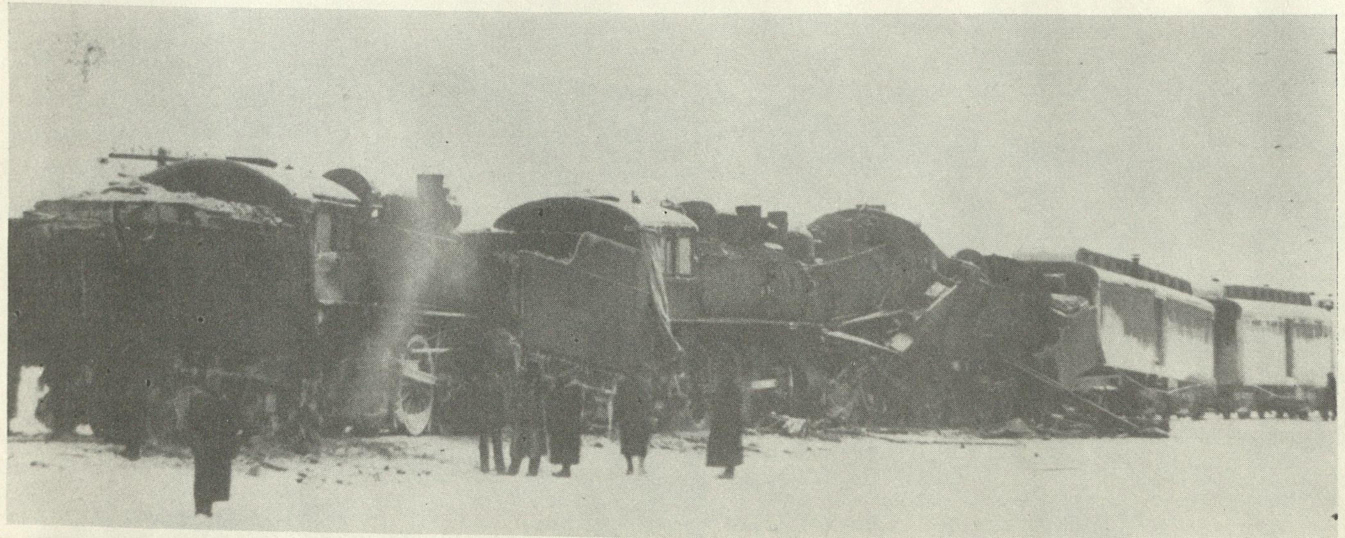


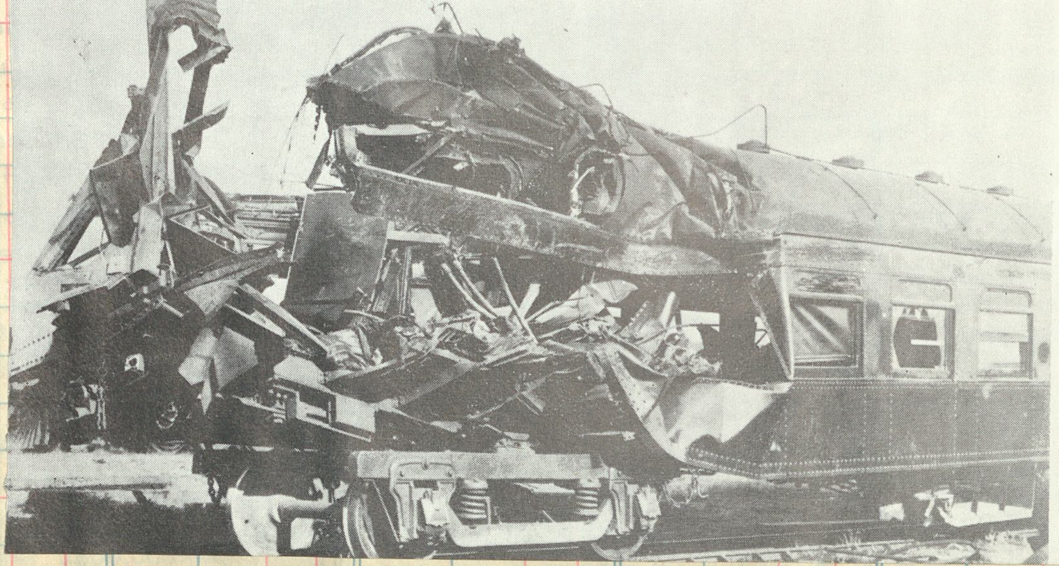
**MONTANA SMASH** took place near Bearmouth, west of Drummond, on the main line of the Northern Pacific on March 5, 1905. This bad head-on collision was caused by a misunderstanding of train orders by the crew on Extra 1252 East, an unscheduled freight train. This crew erroneously believed they had a "run late" order stating that Train No. 3, the westbound passenger, was 3 hours 20 minutes late on her timetable schedule; actually, No. 3 was only 20 minutes late, and the mistake ended in this pile-up. The photo was taken shortly after the crash and shows smoke still wisping from the stack of each engine. Engine 1252 was a tandem compound Consolidation type, her double cylinder showing clearly; note the badly kinked main rod on Engine 1322, just to the right of the white-clad cook, and the fact that all of the driving wheels of both locomotives came to rest hanging in the air, clear of the rails. The telescoped Railway Post Office car jammed over No. 3's engine gives mute testimony to the force of the collision. Wrecks such as this one pressured the railroads to install automatic block signals to prevent similar accidents and cut down the toll of dead and injured passengers and crewmen. The development and use of such safety devices was instrumental in building the wonderful safety records enjoyed by modern railroads. (Courtesy of Ronald V. Nixon)



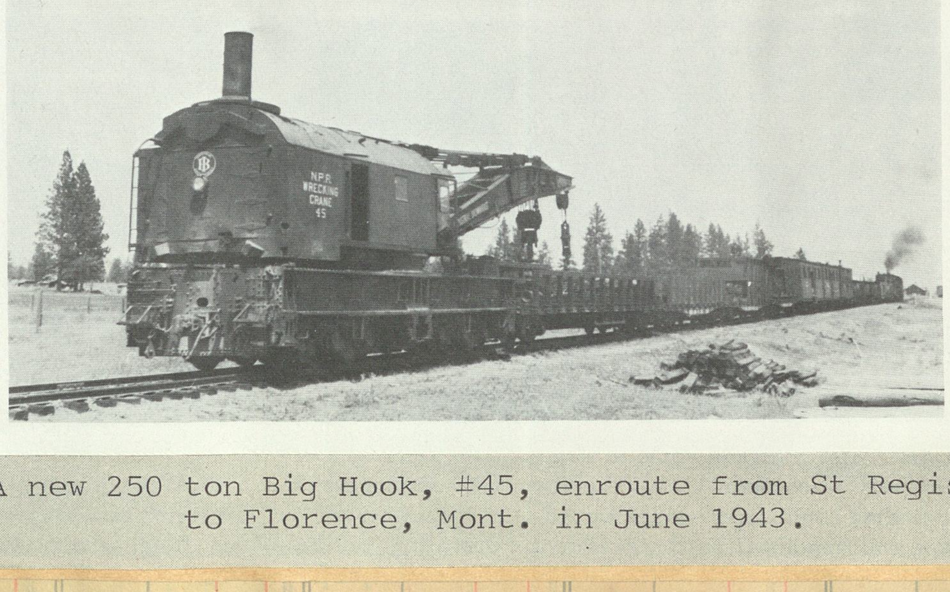
**REAR-END COLLISION** on the Northern Pacific near Fertile, Minnesota, took place about the turn of the century. This photo shows the freakish effects of the crash; the force of the impact of collision has driven the caboose neatly on top of a flat car, while a second flat car has knocked out the entire front end of the caboose and passed more than half of its length inside the crummy, leaving the caboose walls and roof practically intact. The locomotive involved in this rear-ender

**CONFUSION OF ORDERS** sent these two Northern Pacific trains into a head-on collision on the windswept barrens of western North Dakota in 1905. The two passenger trains involved were both being doubleheaded, Train 4 being handled by Engines 241 and 249 and Train 5 wheeling along behind Engines 240 and 2127. The train orders in use at the time were handwritten, and one of the flimsies gave the two strings of varnish at straight meet at Knowlton. Due to a similarity in names, the crew of one train mis-read the operator's scrawled "Knowlton" for "Richardton," another station nearby. The results of this mistake are graphically depicted in this photo, showing the four locomotives locked together on the snowy plans. To prevent a recurrence of this accident, Knowlton station was immediately renamed Boyle. This is but one of many such instances found in the annals of Western railroading, and the wonder is that such lapses were not more frequent; one Western line, in its early days, had stations named Riverview, Riverside, and Riverdale, all located in close proximity. The use of the typewriter for transcribing train orders also was a help in eliminating such mistakes, proving far more legible than many specimens of the old "op fist" of scrawled and looped words written by hand with stylus and carbon on the thin tissue used for train orders. Note the heavy coating of frost on the head-end cars at right in this photo, silent testimony to the bitter cold that chilled the plains in winter. (Courtesy of Ronald V. Nixon)





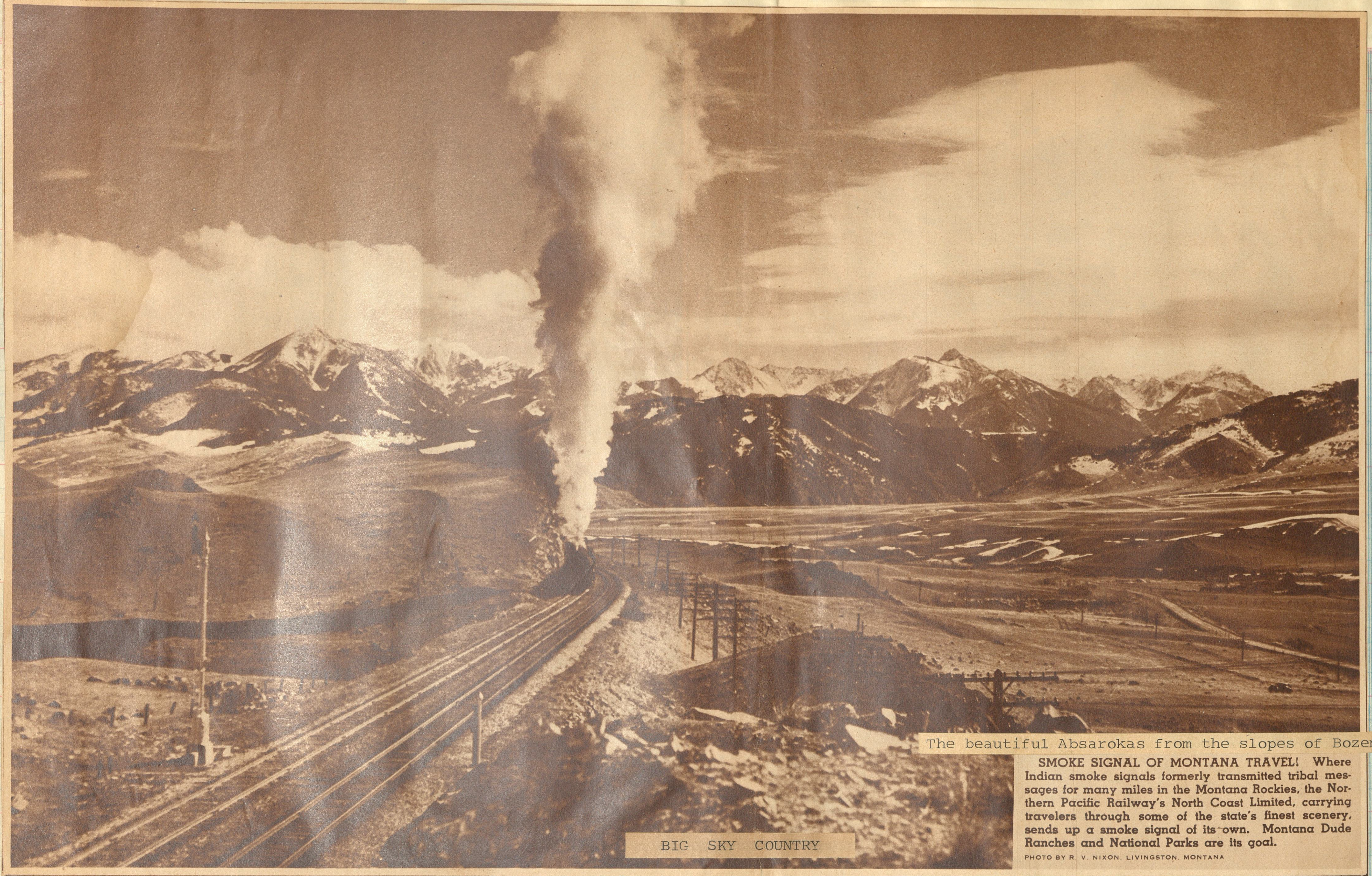
**ANOTHER EXAMPLE** of the vulnerability of steel cars to telescoping is this mangled coach of the Northern Pacific Road, which was crushed a third its length in 1913 at Lakeview, Wash.



A new 250 ton Big Hook, #45, enroute from St Regis to Florence, Mont. in June 1943.

Wrecker #45 had a rather brief career. Its first job was helping rerail the 5140 just east of St Regis on June 18, 1943. Then was called to Florence on the Darby branch where the 1356 broke thru the bridge and fell into the Bitterroot River. In the attempt to extricate 1356 the 45 too fell into the river and had to be cut up in order to be removed.

Clos. No. Sold Amount

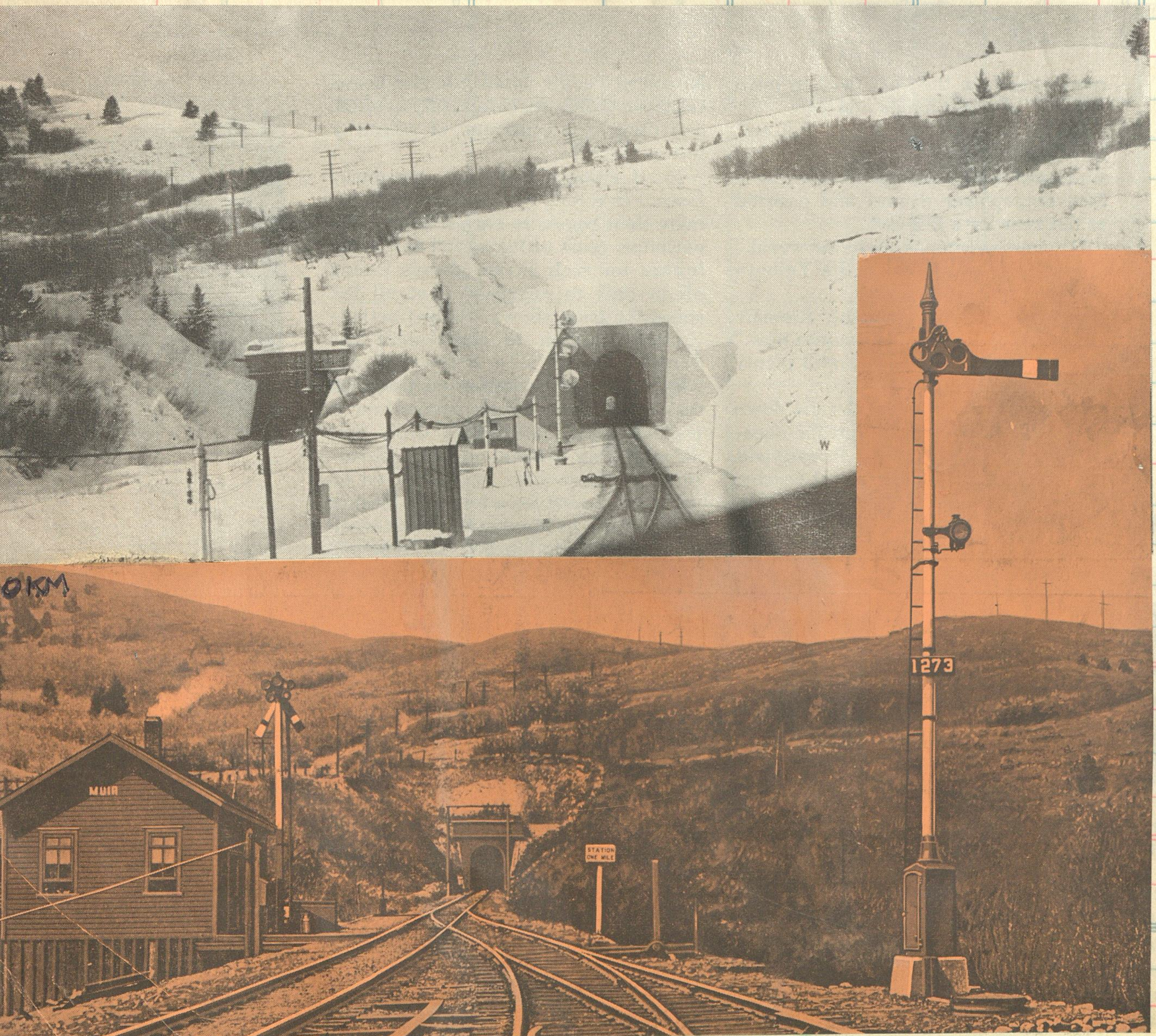


The beautiful Absarokas from the slopes of Bozeman Pass

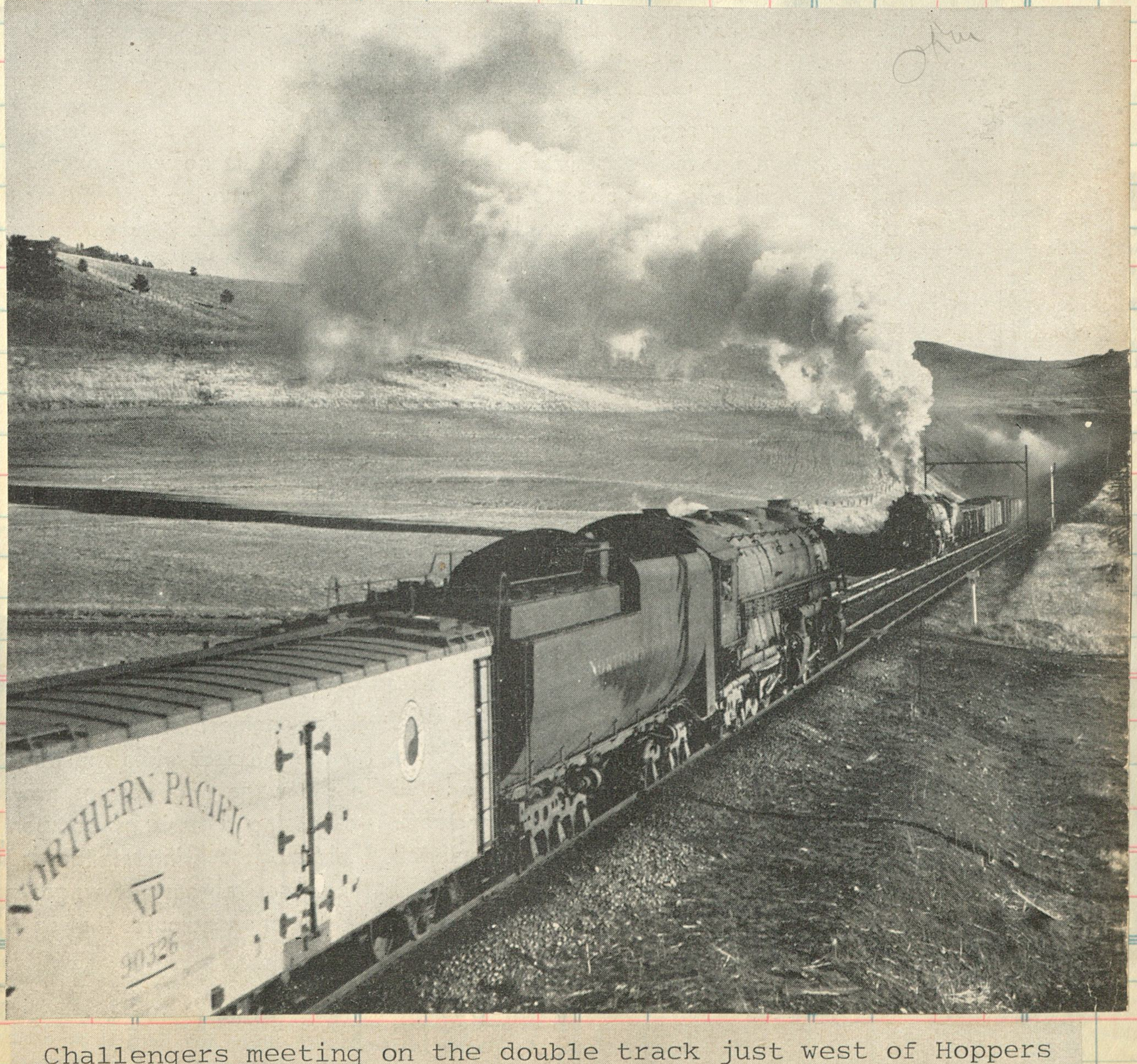
**SMOKE SIGNAL OF MONTANA TRAVEL!** Where Indian smoke signals formerly transmitted tribal messages for many miles in the Montana Rockies, the Northern Pacific Railway's North Coast Limited, carrying travelers through some of the state's finest scenery, sends up a smoke signal of its own. Montana Dude Ranches and National Parks are its goal.

PHOTO BY R. V. NIXON, LIVINGSTON, MONTANA

BIG SKY COUNTRY



Muir, fifteen miles west of Livingston, and the eastern portal of the 3654 foot Bozeman tunnel [elv 5592 ft]. Bottom-about 1920, top- the new bore completed July 1945



Challengers meeting on the double track just west of Hoppers Tunnel, about five miles east of Bozeman summit.

## ALASKAN

**TRAIN No. 4 (Eastbound)**

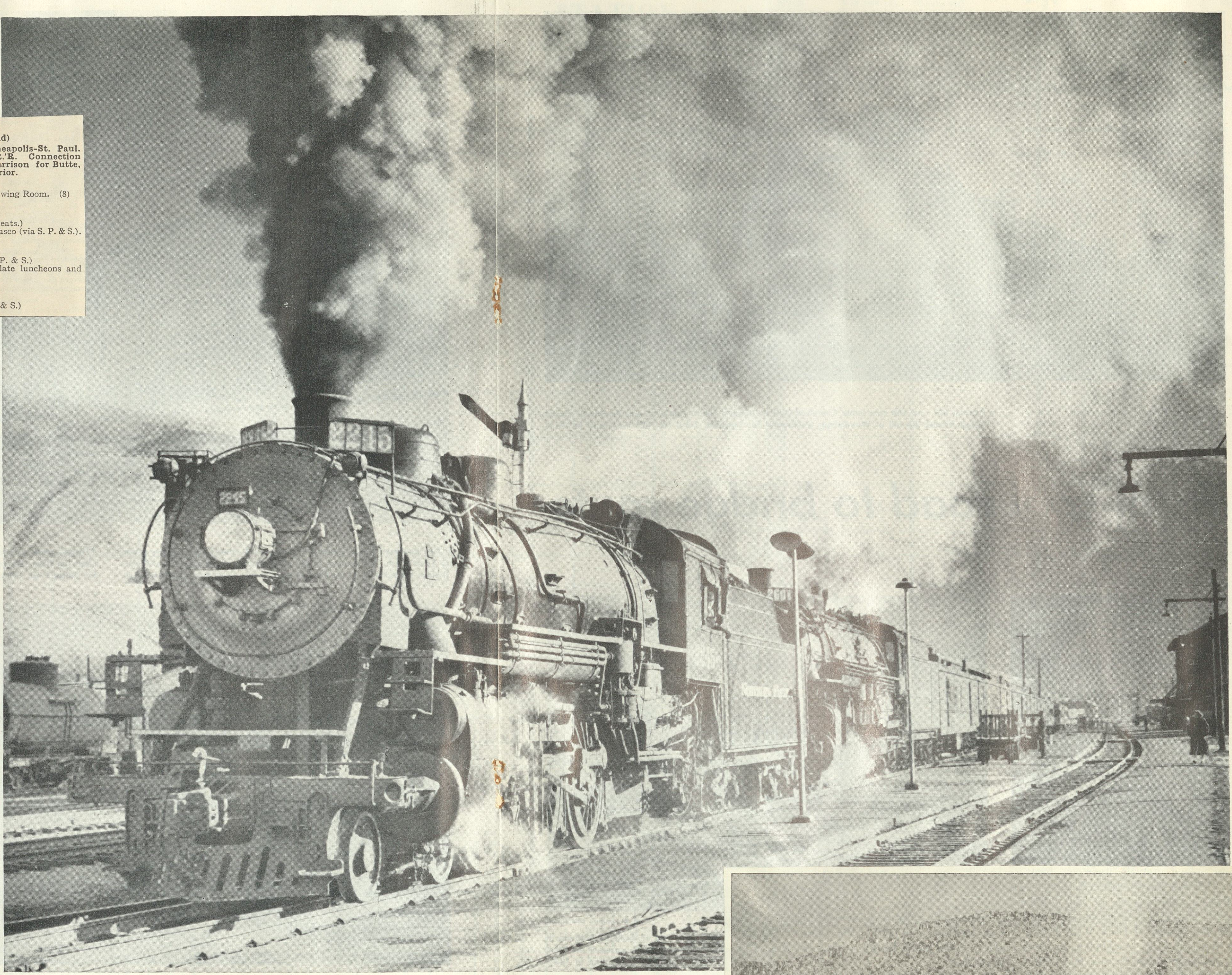
**Seattle-Tacoma, via Spokane and Helena, to Minneapolis-St. Paul. Connection at St. Paul for Chicago, via C. B. & Q. R.'R. Connection at Pasco from Portland, via S. P. & S. Ry. at Garrison for Butte, at Logan from Butte; at Staples for Duluth-Superior.**

**Pullman Standard Sleeping Car—Air-Conditioned:—**
Spokane to St. Paul, 10 Section, 1 Compartment, 1 Drawing Room. (8)
◉Fargo to St. Paul, 12 Section, 1 Drawing Room. (10)

**Reserved Seat Coach—Air-Conditioned:—**
Seattle to Spokane. (Car A) (Small extra charge for seats.)
Connecting Reserved Seat Coach A. C.—Portland to Pasco (via S. P. & S.).

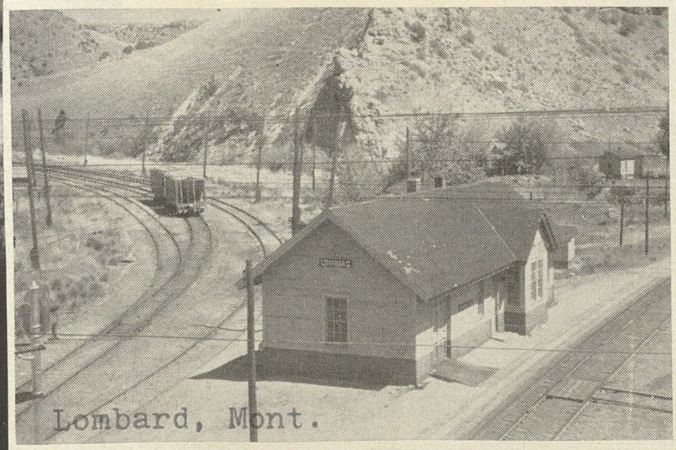
**Cafe Car—Air-Conditioned:—**
Seattle to St. Paul.
Connecting Cafe Car A. C. Portland to Pasco (via S. P. & S.)
A la carte service; also club breakfasts. Special plate luncheons and dinners. Table d'hote dinner, $1.00.

**Coaches—Air-Conditioned:—**
Seattle-Tacoma to Minneapolis-St. Paul.
Connecting Coach A. C. Portland to Pasco (via S. P. & S.)

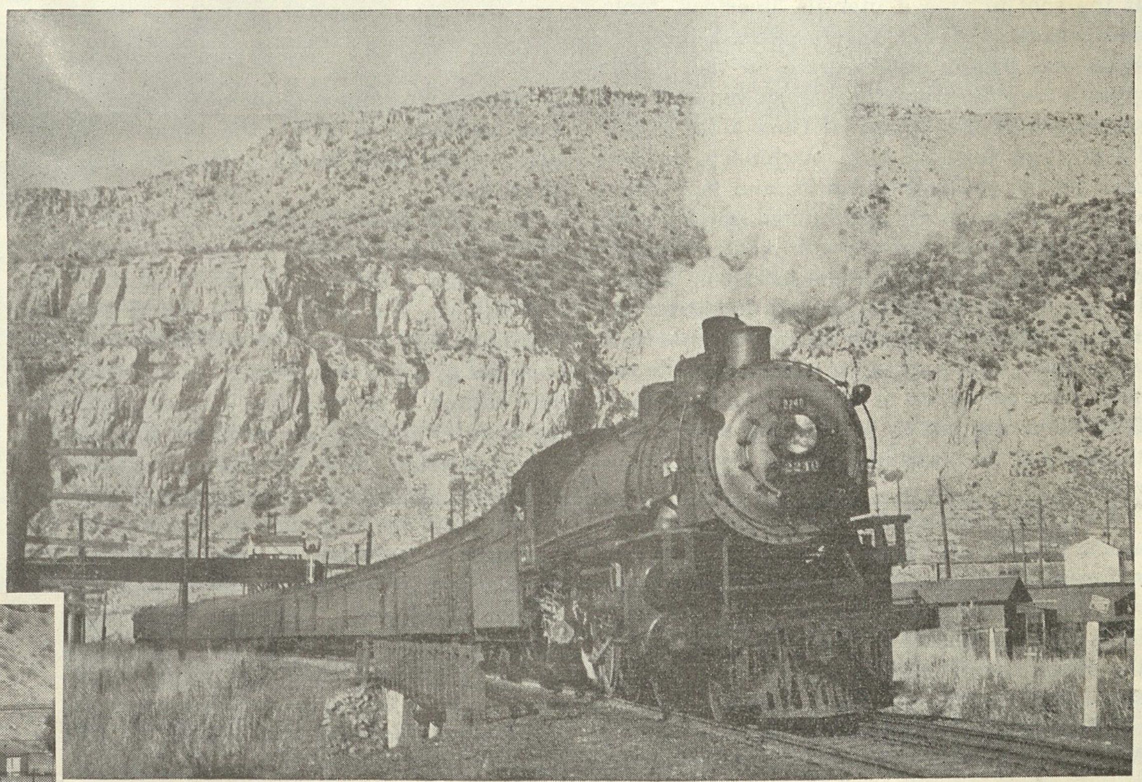


The early morning chill is still in the mountain air as Northern Pacific's eastbound Alaskan pulls out of Missoula, Mont., behind a heavy Pacific (No. 2245) and a Northern type locomotive (No. 2607). This is the second section of the "work train" that leaves Tacoma at 7:50 in the morning, makes practically all stops, and ends up in St. Paul nearly 72 hours later. The Alaskan will leave the route of the North Coast Limited at Garrison to serve Helena, Mont., and will rejoin the other route at Logan. The North Coast Limited runs via Butte.

In the American Rockies Along the Northern Pacific Railway

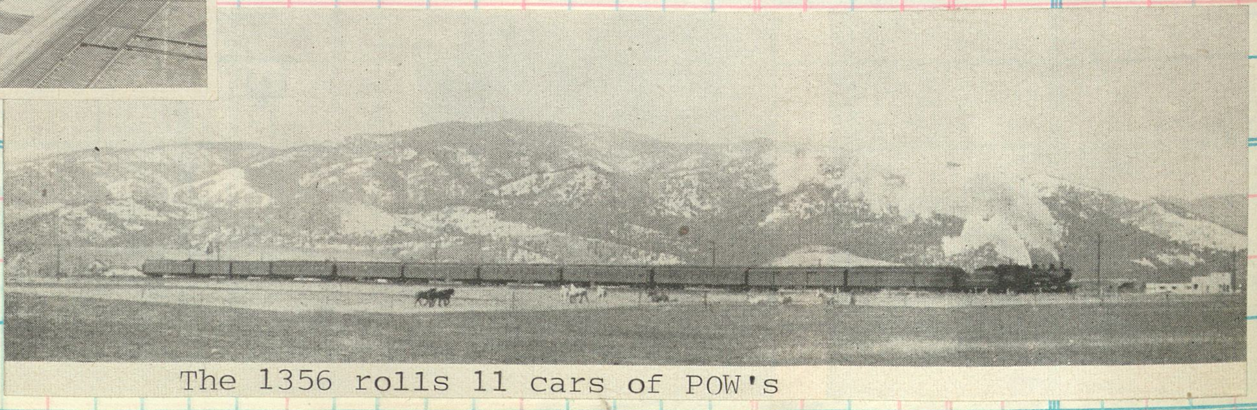


Lombard, Mont.



W. R. McGee

A big Q-5 Pacific, 2240, leads the ALASKAN [#4] thru Lombard, Mont. The Milwaukee Road overhead bridge in background

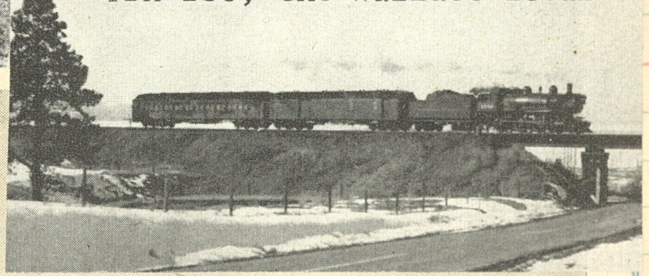


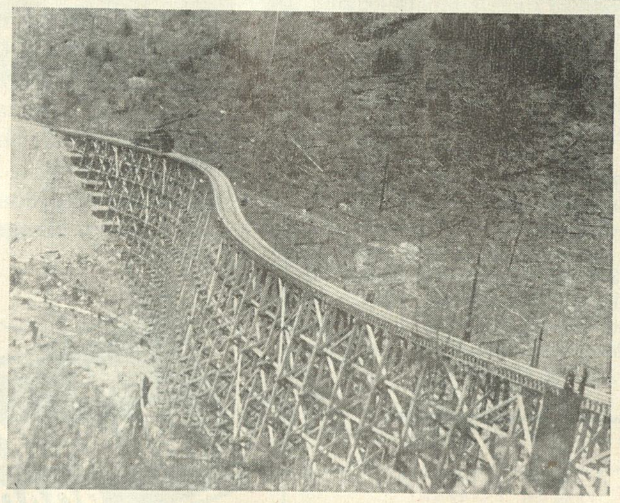
The 1356 rolls 11 cars of POW's

Working over Lookout

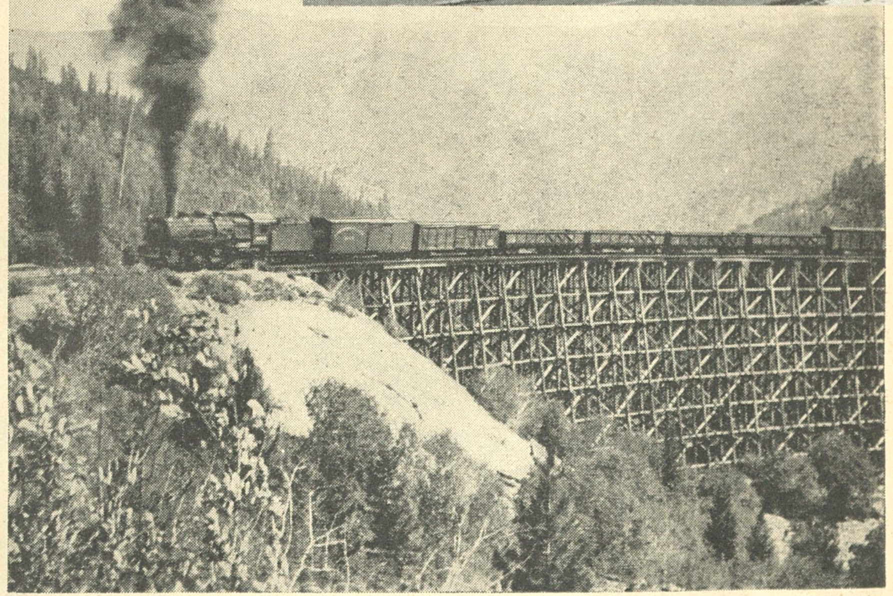
Sold Amount

Trn 256, the Wallace local





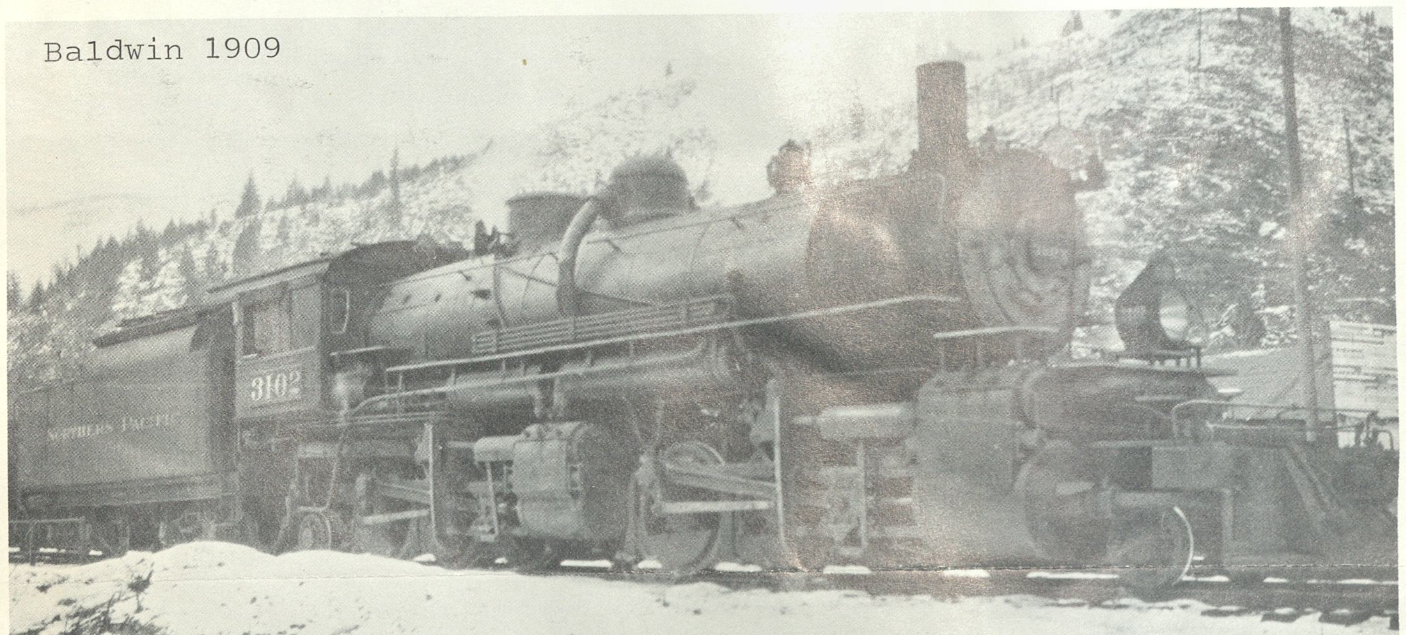
WHEN FIRE SWEPT through the forests in 1910, the 1356 played a heroic role moving refugees out of Wallace, Ida. This S-shaped bridge, 800 feet long and 155 feet high, collapsed shortly after 4-6-0 took rescue run across.



R. Levering

NORTHERN PACIFIC RAILROAD BRANCH LINE FREIGHT CROSSING "S" BRIDGE 15 MILES EAST OF WALLACE, IDAHO

Baldwin 1909

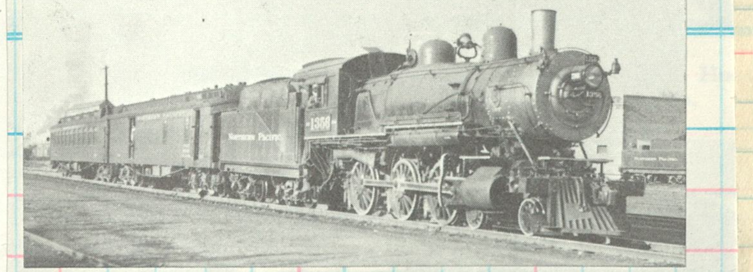


Org Noed 4000-4002, renoed 1910 as 3100-3102

W. R. McGEE

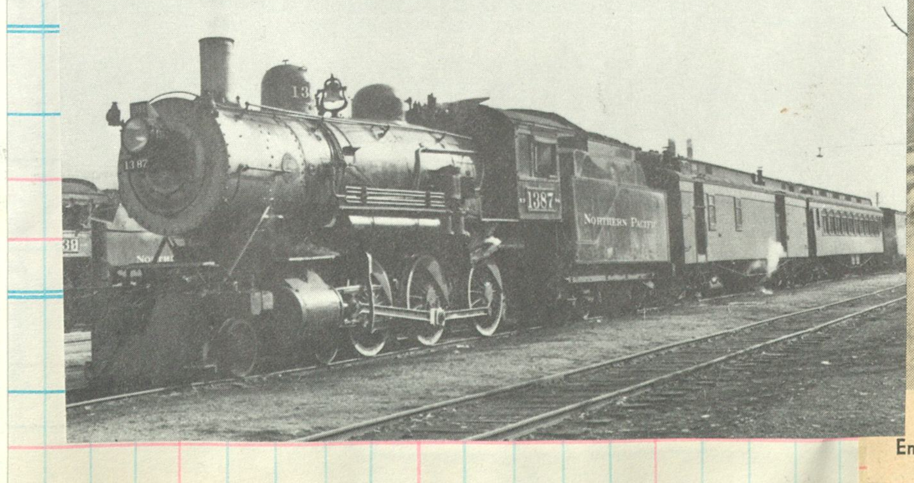
on the spot at Lookout

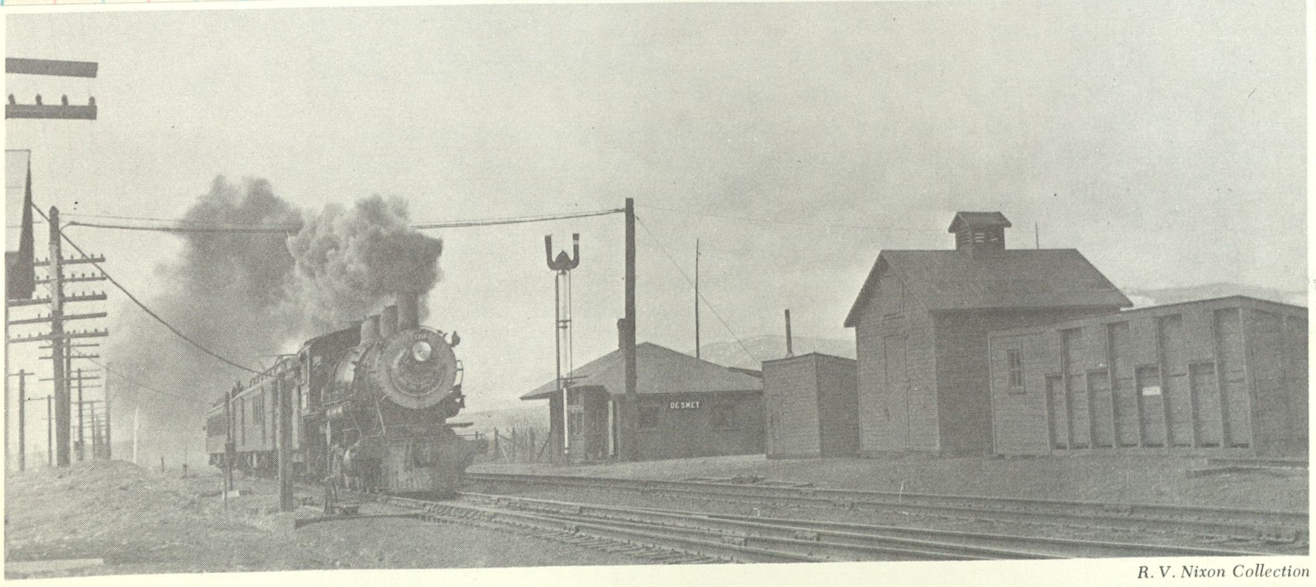
#264 arr at Missoula



W. R. McGee Photo

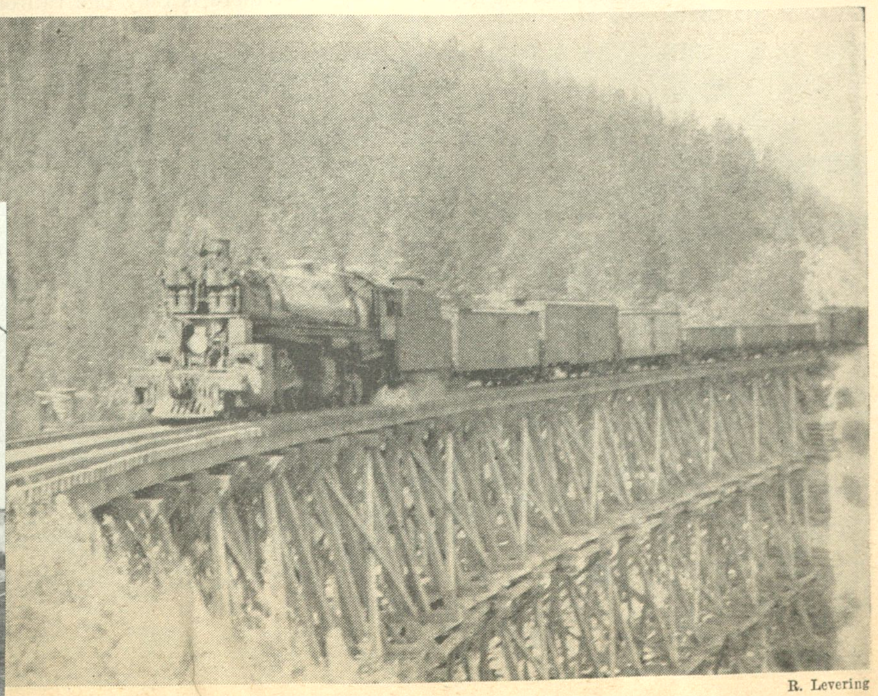
Another view of 1387 about to head a Wallace bound No. 255 passenger out of Missoula February 14, 1941. The No. 255 was waiting for the No. 3 Alaskan which she had to follow out of town until the Coeur d'Alene Branch diverged from the main line at DeSmet, Montana.





R. V. Nixon Collection

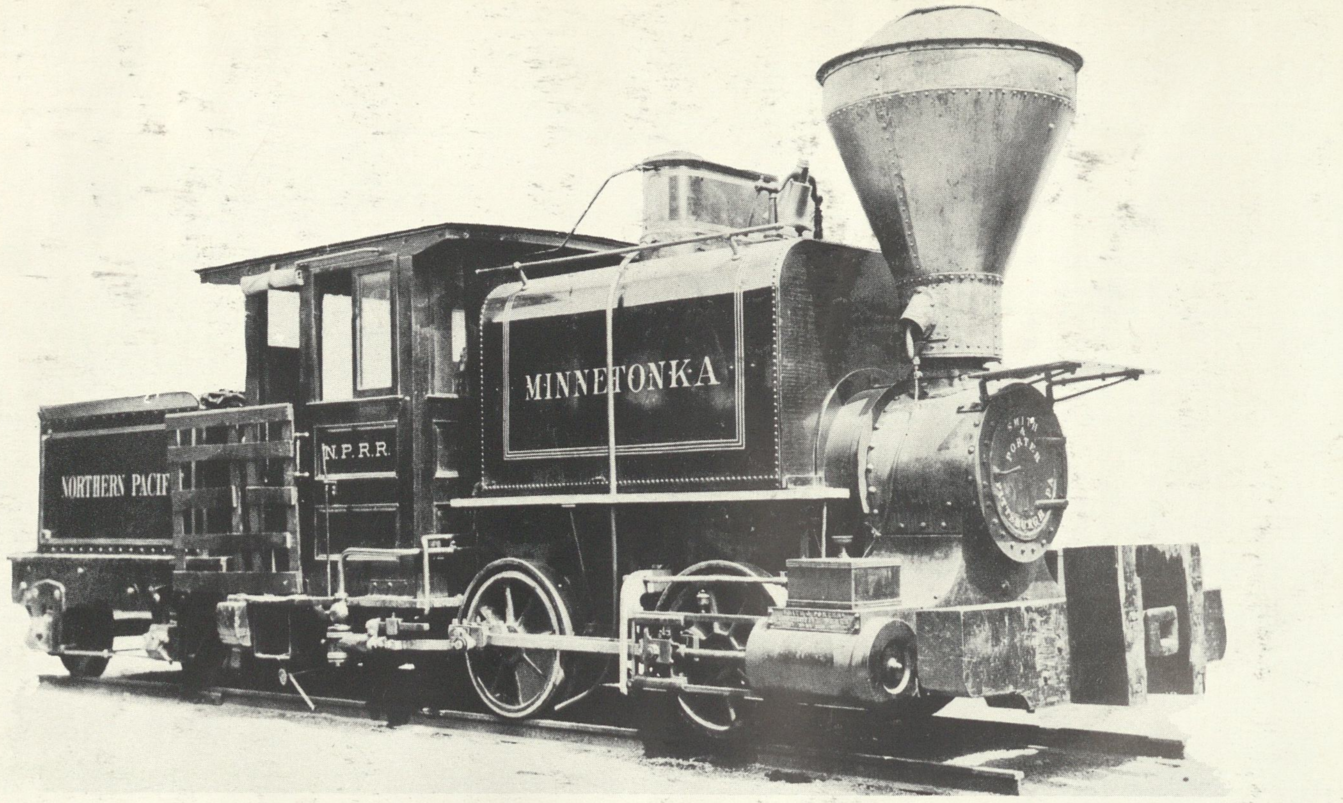
DeSmet, Montana, six miles west of Missoula, was the point where the Coeur d'Alene Branch left the NP main line. Here, passing DeSmet with the Wallace local (No. 264) in April, 1932, is the famous Ten Wheeler No. 1356. This locomotive is now on display in Missoula.



R. Levering

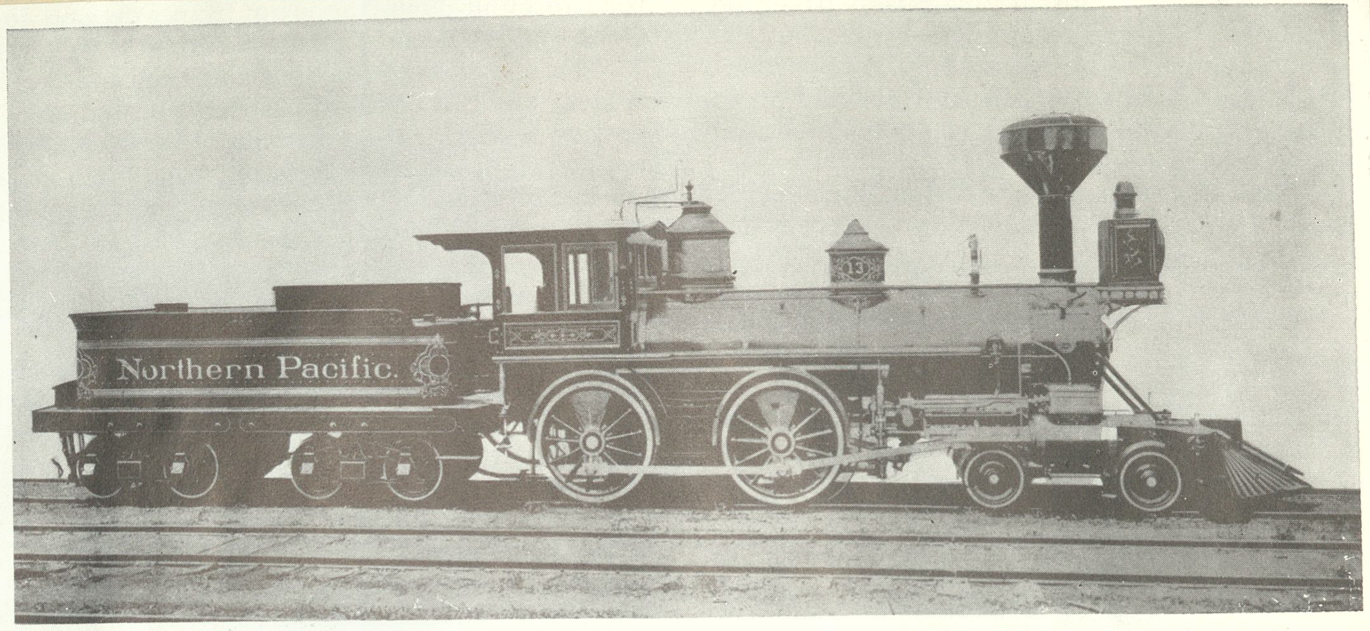
NORTHERN PACIFIC FREIGHT ASCENDING GRADE

Engine 4020 is shown pulling a ~~long~~ freight up the 4 percent grade on Bitter Root Mountains, 17 miles east of Wallace, Idaho.



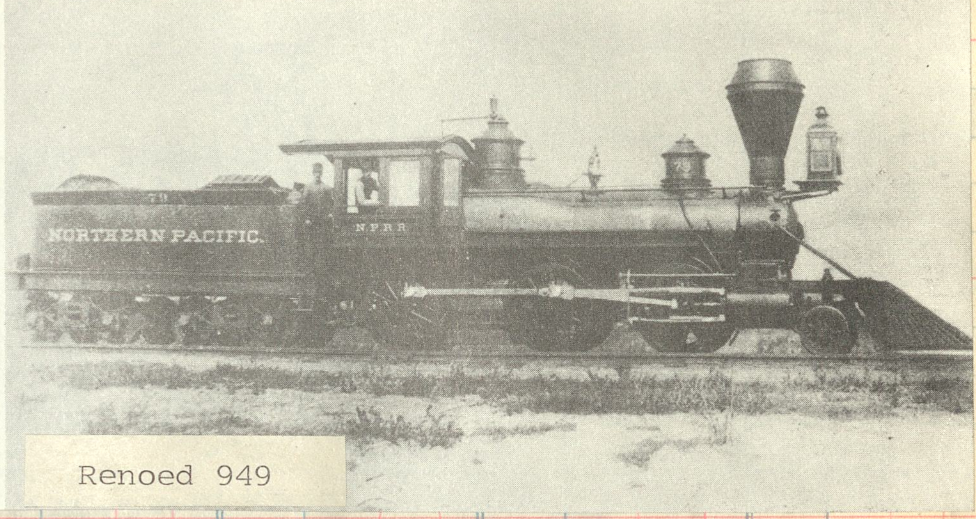
NORTHERN PACIFIC RAILROAD "MINNETONKA"

Built by Smith & Porter in 1870, the old Minnetonka has been carefully preserved by the NPRR and is frequently seen at railroad shows and historical observances. The Minnetonka ran under her own power at the Chicago RR. Fair in 1948-9 in "Wheels A'Rolling." Shown here May 27, 1938, N. Y. W. F. Ted Gay Photo.

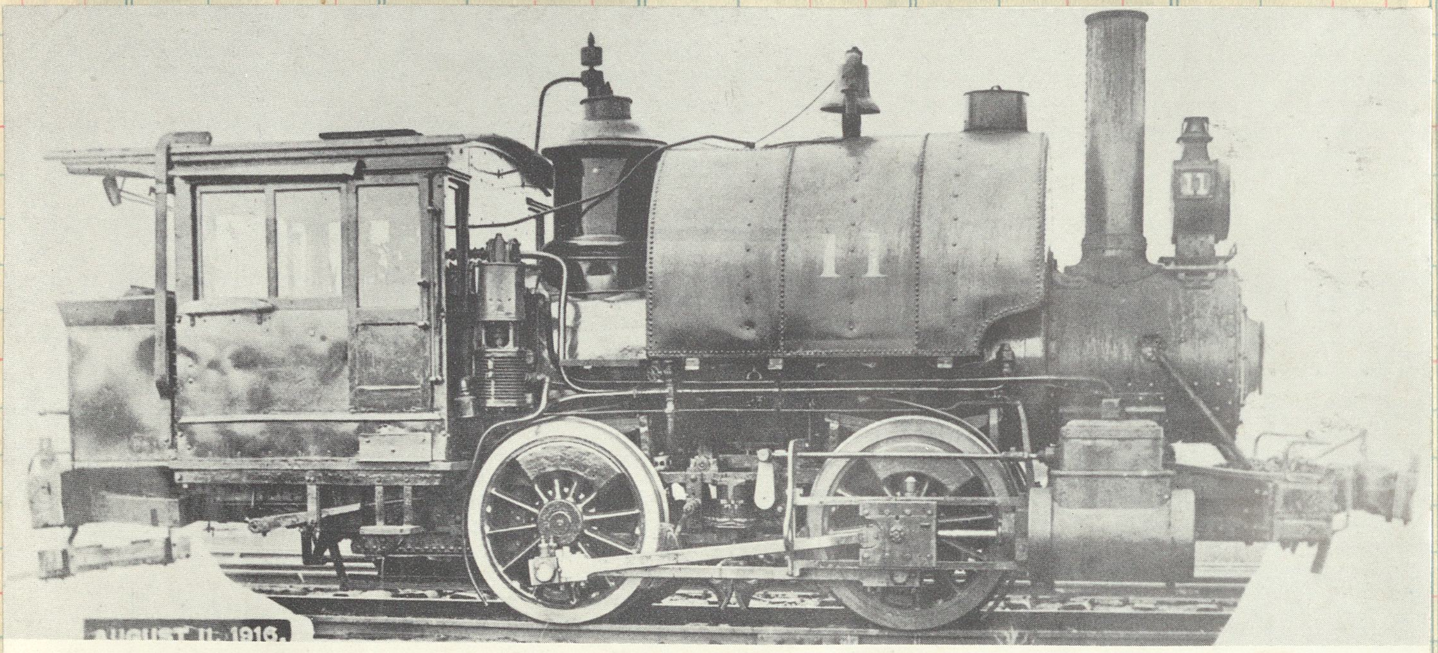


**HENRY VILLARD's "BLIND POOL"** was formed early in 1881 to provide the financial ammunition for his battle to gain control of the Northern Pacific, and in the same year the Baldwin Locomotive Works turned out a Mogul bearing Shop No. 5566. This engine became Northern Pacific's No. 79, a 2-6-0 designed for heavy freight duty. She served faithfully until outmoded, then was converted into an 0-6-0 for yard service and renumbered 949. This photo shows the engine as originally built when she was wheeling drags over the road that was later to lay claim to the title of "The Main Street of the Northwest."

(Courtesy of Dr. S. R. Wood)



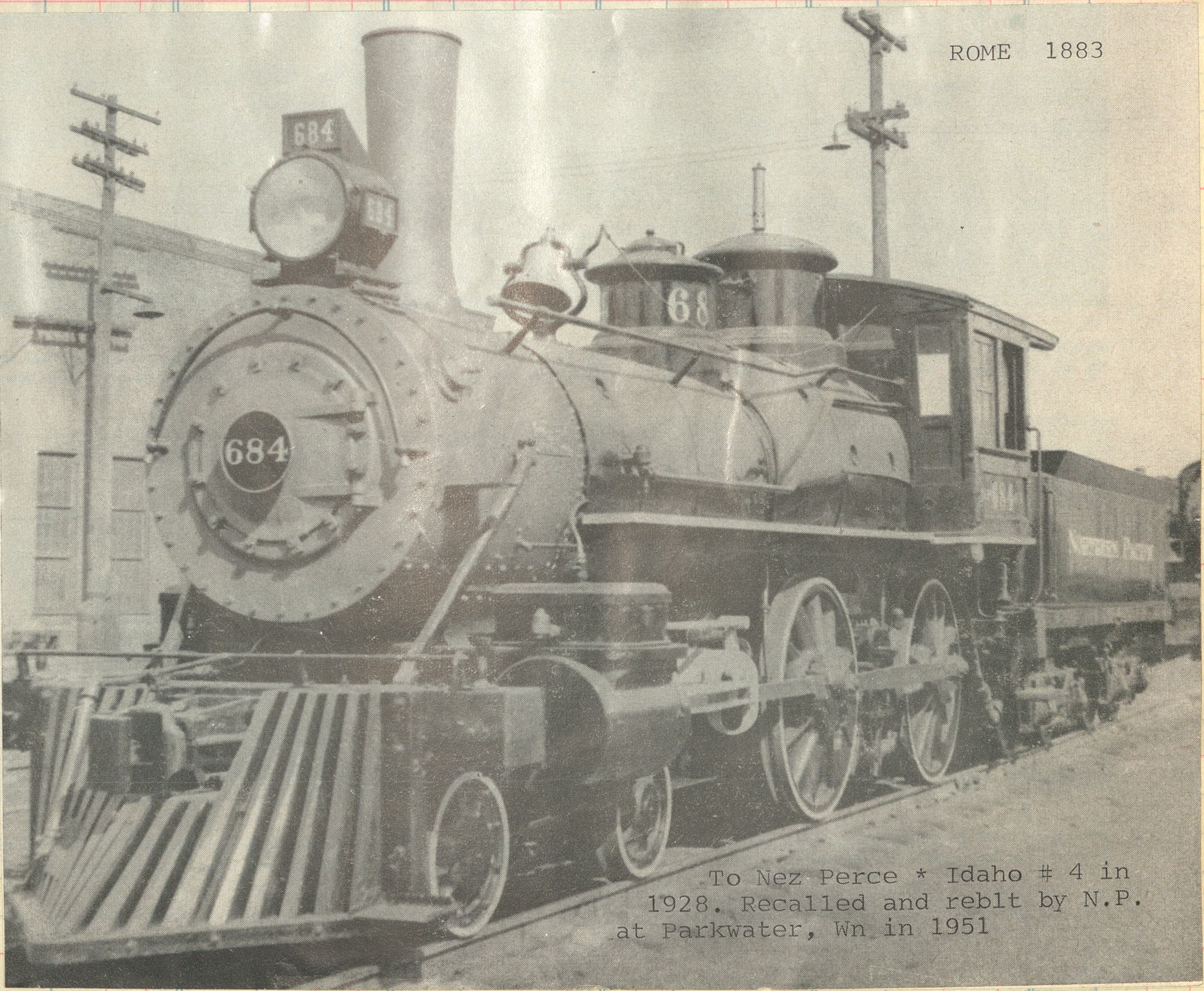
Renoed 949



NORTHERN PACIFIC RAILROAD NO. 11

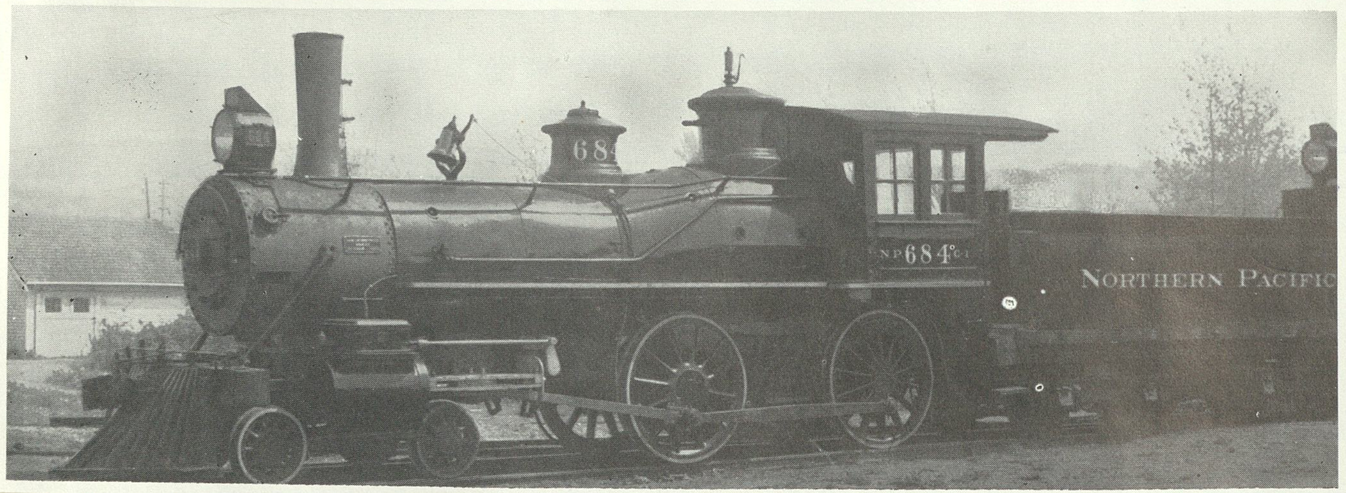
Another Baldwin product dating back to 1871 is this small shop engine that weighed 65200 pounds. It had 48½" drivers and a tank capacity of 800 gal. No. 11 had a boiler pressure of 120 pounds and the small coal bin held 3500 pounds of coal. Total length was only 26' 1½". No. 11 was dismantled at Brainerd on Sept. 28, 1929. NP Photo.

26

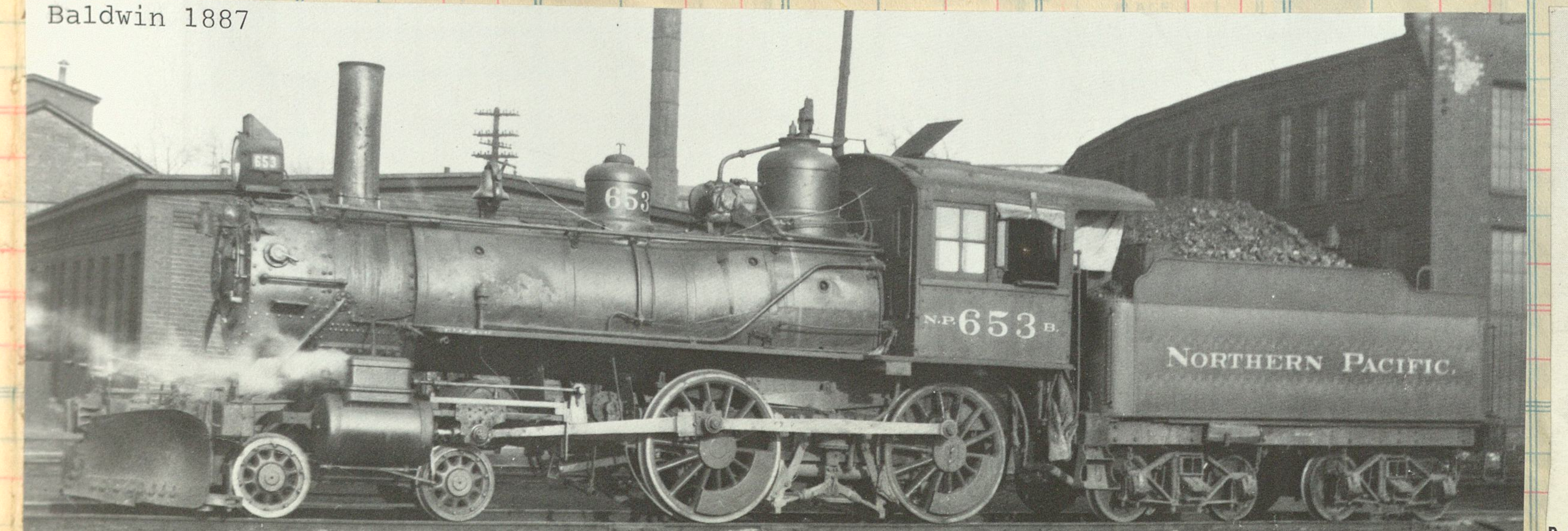


ROME 1883

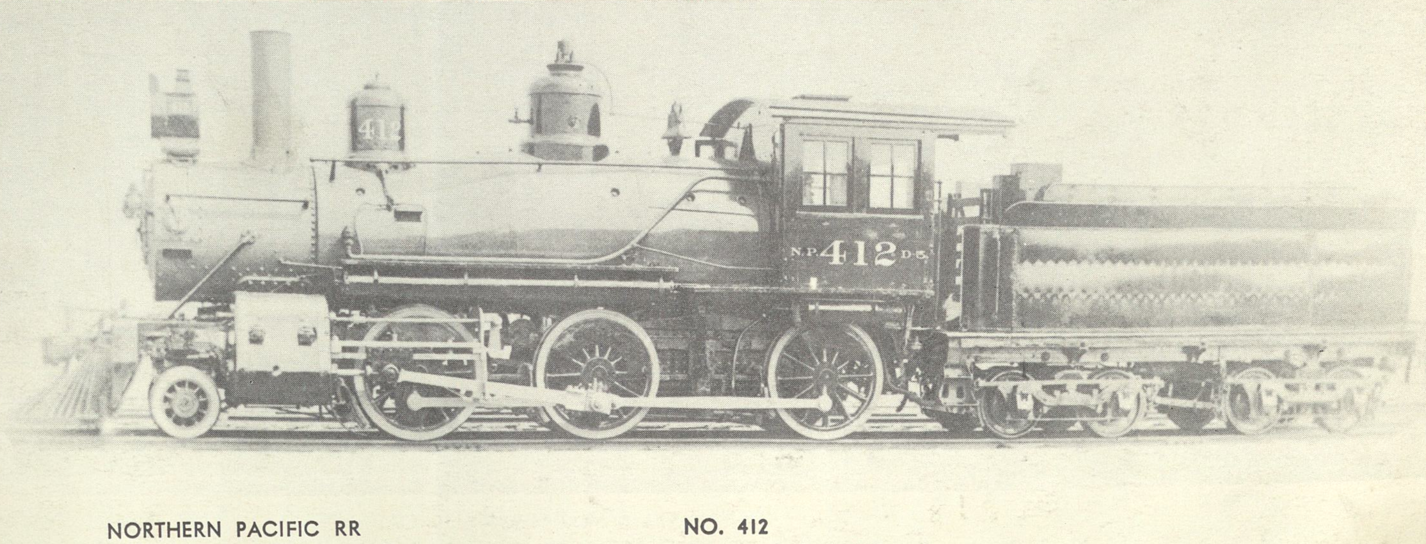
To Nez Perce * Idaho # 4 in 1928. Recalled and reblt by N.P. at Parkwater, Wn in 1951



Baldwin 1887



no 406 8566



NORTHERN PACIFIC RR NO. 412

Baldwin built 22 locomotives of road class D-5 for the NP. Of these, engines 430-432 were simple, with 180 lbs. pressure and weighed 108600 pounds. Engines 404-409, 410-418, 426-429 were compound, had 200 lbs. pressure and weighed somewhat more. All had 56" drivers. Eng. No. 412 still on roster April 1953. N. P. RR Photo.

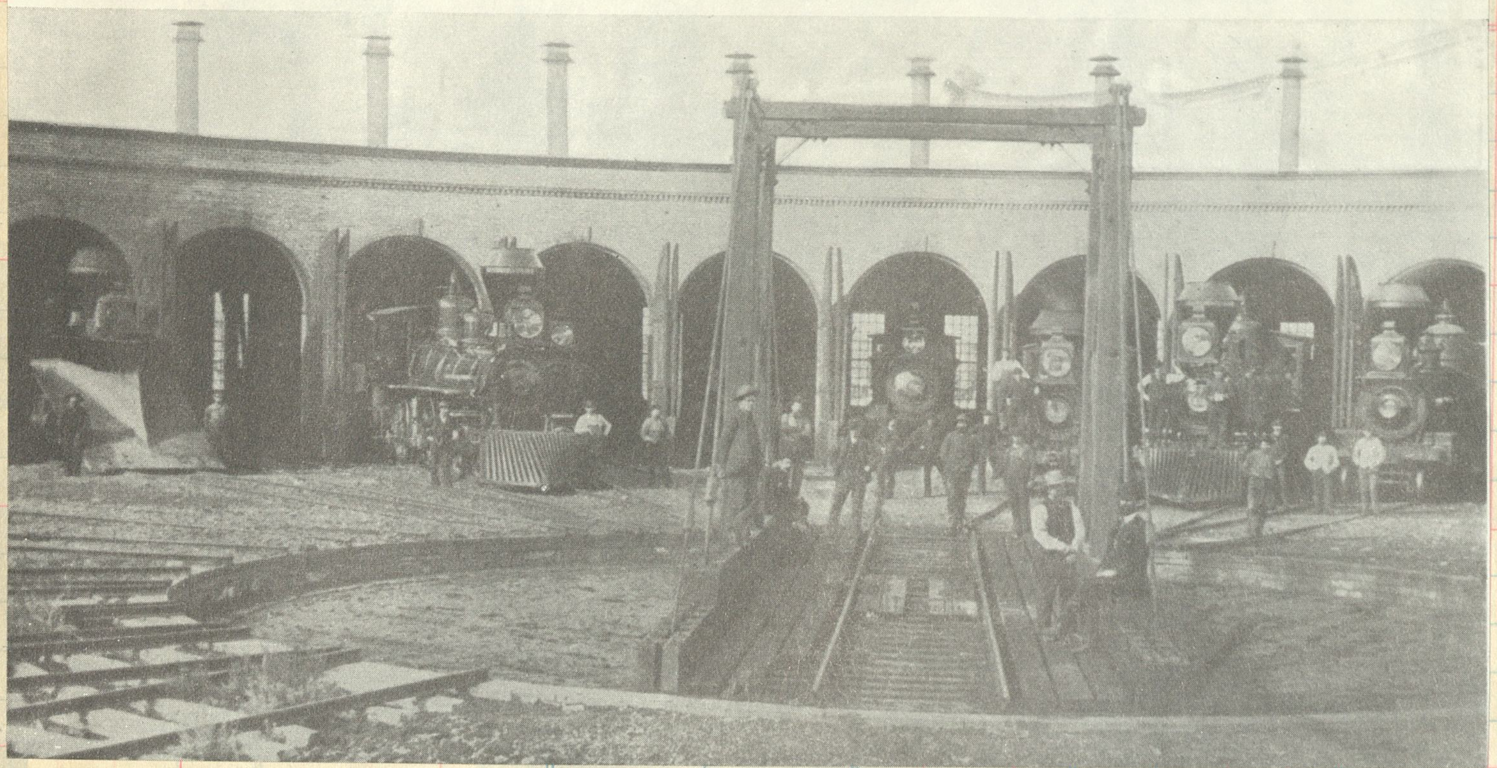
2

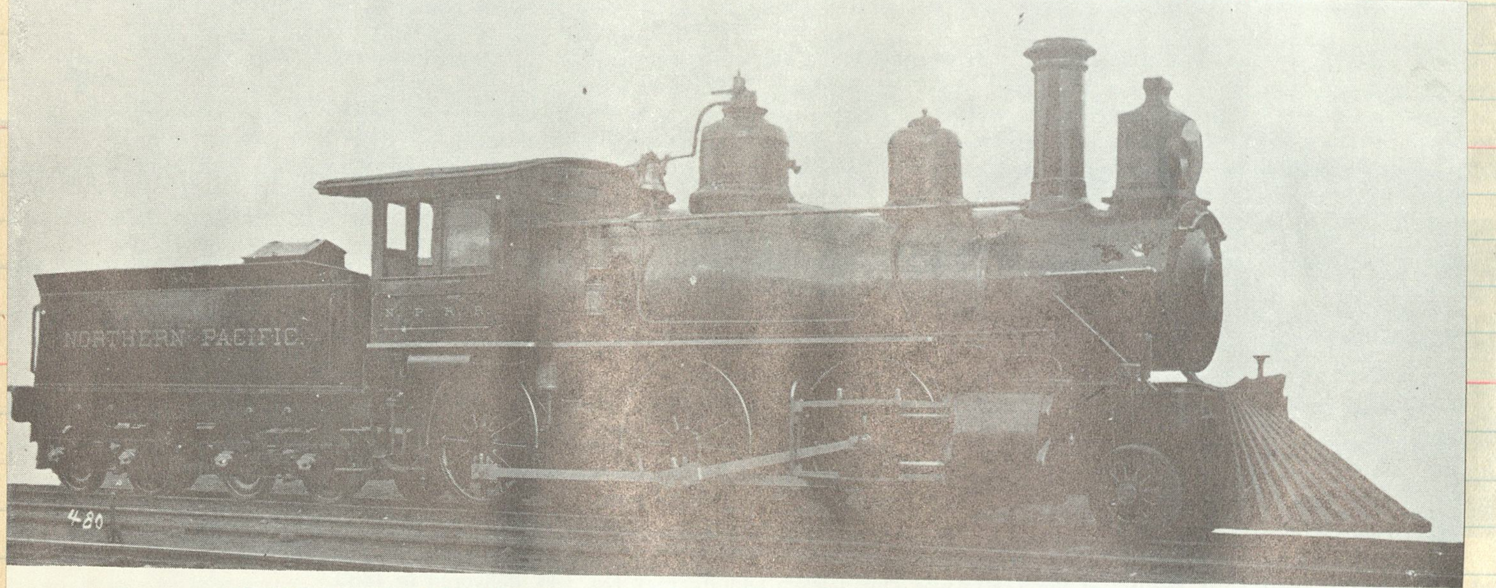
102

+

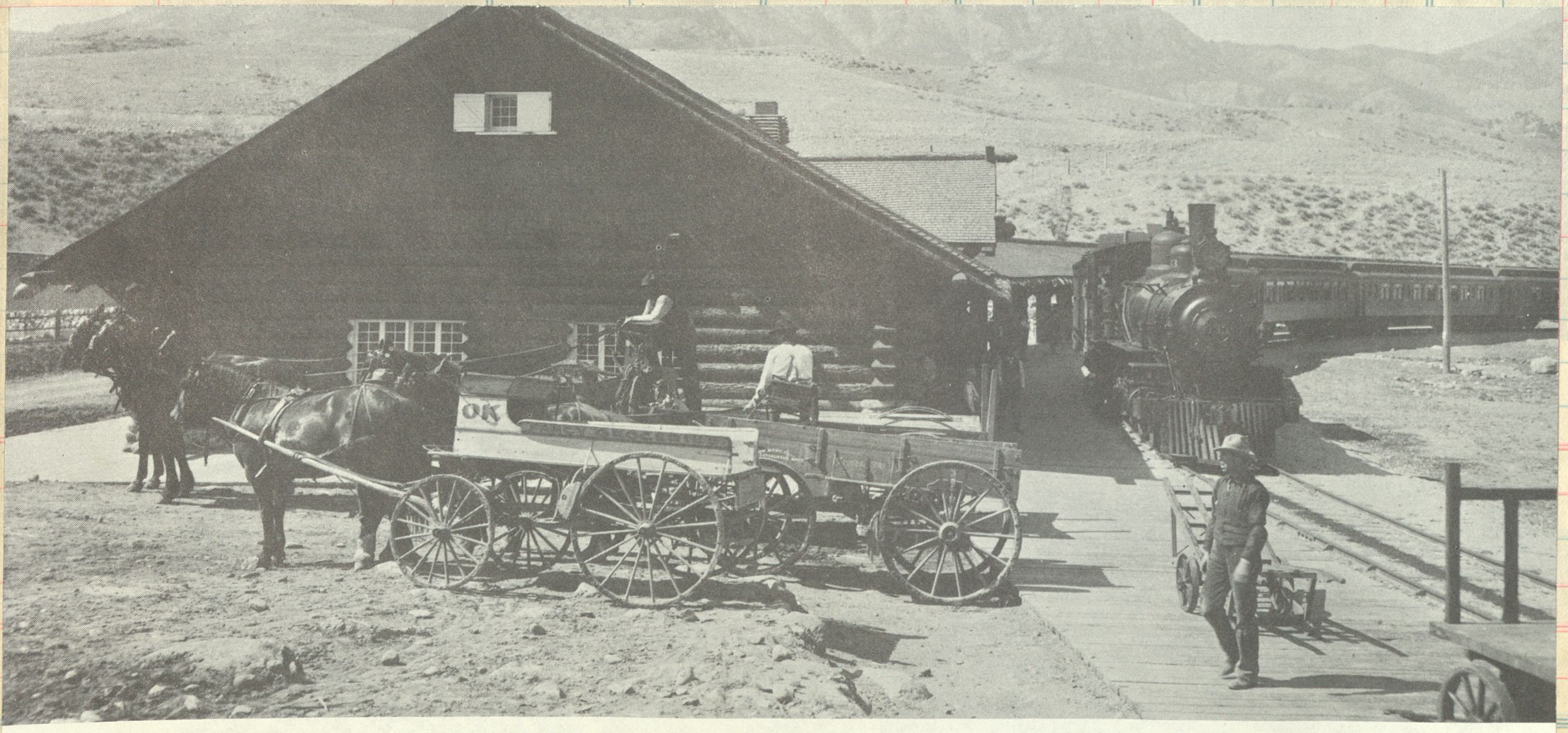
**BEVY OF BALLOON STACKERS** line up for the photographer at the Northern Pacific's brick roundhouse located in Billings Montana, in this view taken in 1884. The "gallows" style wooden turntable in the foreground is typical of the equipment in use at that time for turning locomotive; at the right side in the immediate foreground can be seen the wooden arm or handle, against which the men pushed in order to furnish the necessary power to revolve the turntable. These manually-operated affairs were known as "Arm-strong" or "Strong Arm" types, and many roads continued to use them for lighter power on branch line facilities until modern times; the writer has helped turn Diesel locomotives on hand-powered turntables similar to the one shown here. Note the huge headlight or pilot snowplow on the engine standing in the stall at far left.

(Courtesy of Ronald V. Nixon)





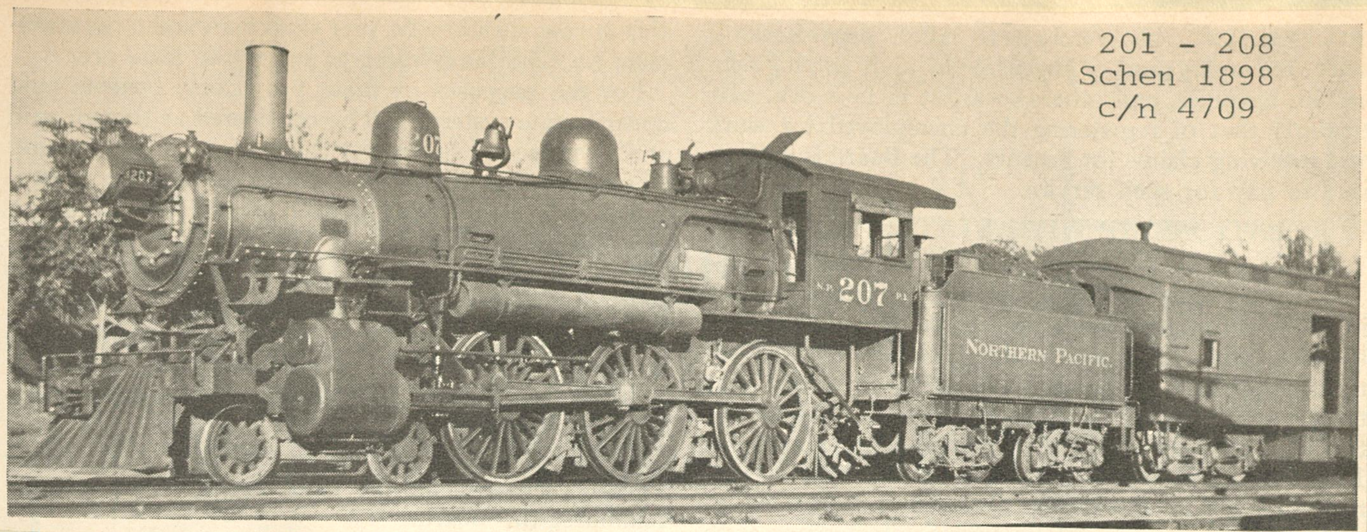
**NO. 587 NORTHERN PACIFIC** compound 2-6-0 participated in some tests which helped to prove conclusively that the compound use of steam was superior to the single expansion methods then available. Locomotive No. 587 and a single expansion mogul No. 584 were used for this comparison test. Both engines were of the same dimensions and weight, and differed only in cylinders and boiler pressure. In one test both locomotives carried 170 lbs. steam pressure. Another was made with the compound engine using 170 lbs. of pressure and the single expansion engine carrying 150 lbs. pressure. Another test was made with both engines carrying 150 lbs. pressure. The tests were run between Staples, North Dakota, and Fargo, North Dakota, a distance of 108.7 miles. Tests were regulated so that equal trains were assigned to each locomotive. On one of these trips the compound locomotive showed a saving of 53.5% in the consumption of fuel. The trip was made with the compound locomotive using its power to the greatest advantage. The average fuel advantage for the entire test period with varying loads, etc, showed the compound locomotive to have an overall advantage of 28% in fuel consumed. The compound locomotive operated at its best on the higher boiler pressure. For twenty years, until the use of superheated steam proved more effective with less mechanical gadgetry, Vauclain compounds were popular throughout the world.



GARDINER, MONTANA Northern Pacific

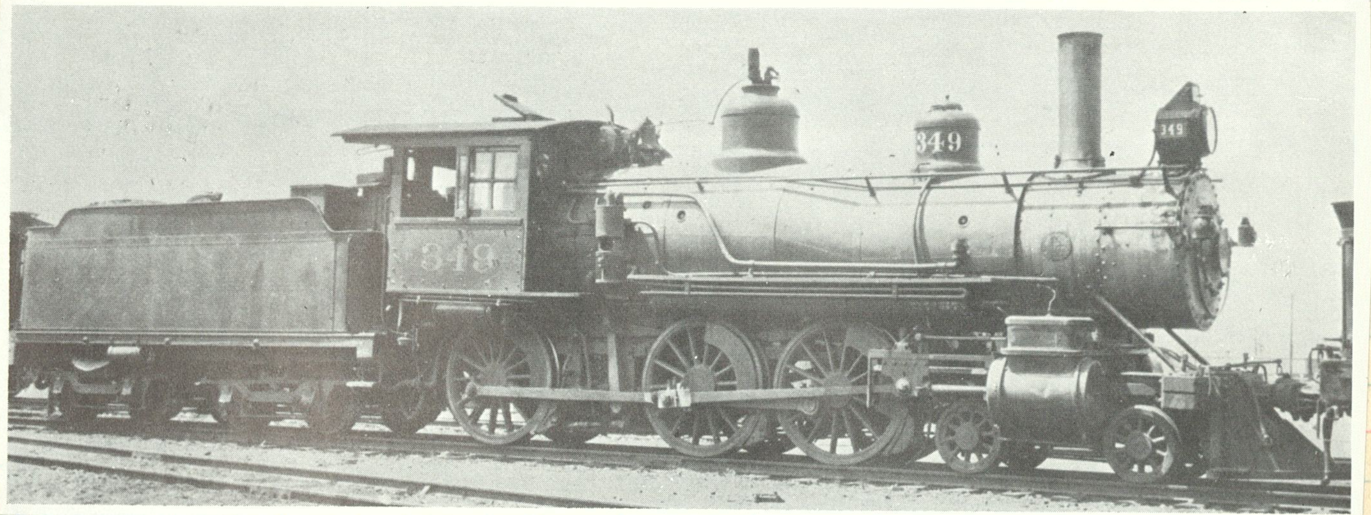
Gardiner is the northern gateway to Yellowstone National Park, fifty-four miles south of the Northern Pacific's main line at Livingston.

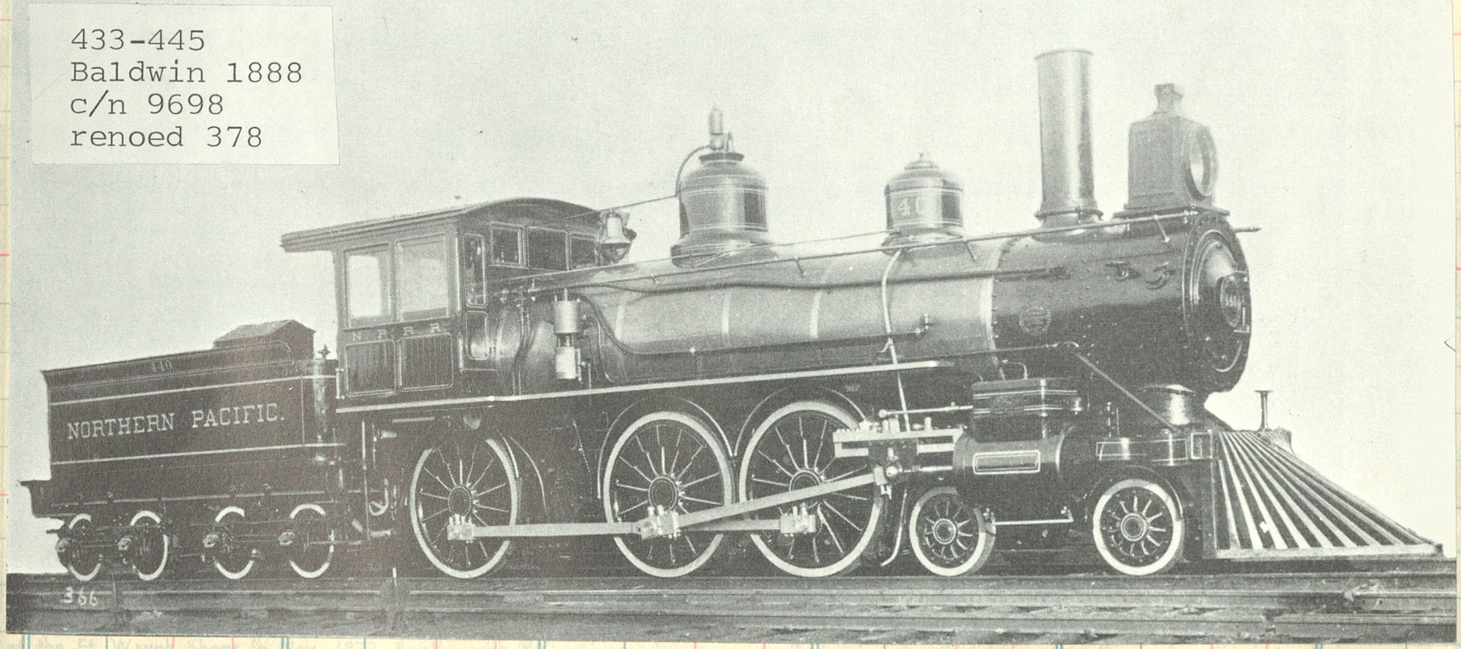
This locomotive is now on display in Missoula.



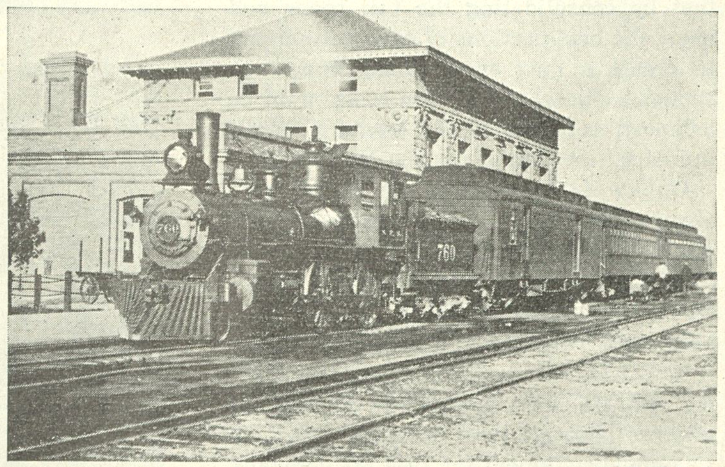
201 - 208
Schen 1898
c/n 4709

L. E. Griffith

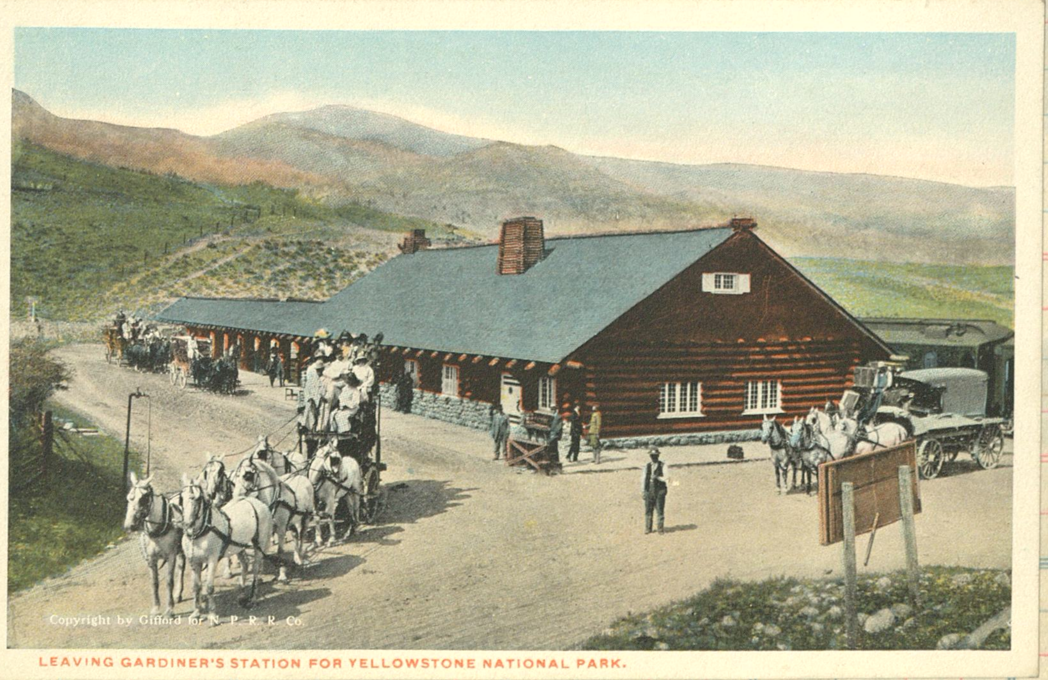




433-445
Baldwin 1888
c/n 9698
renoed 378

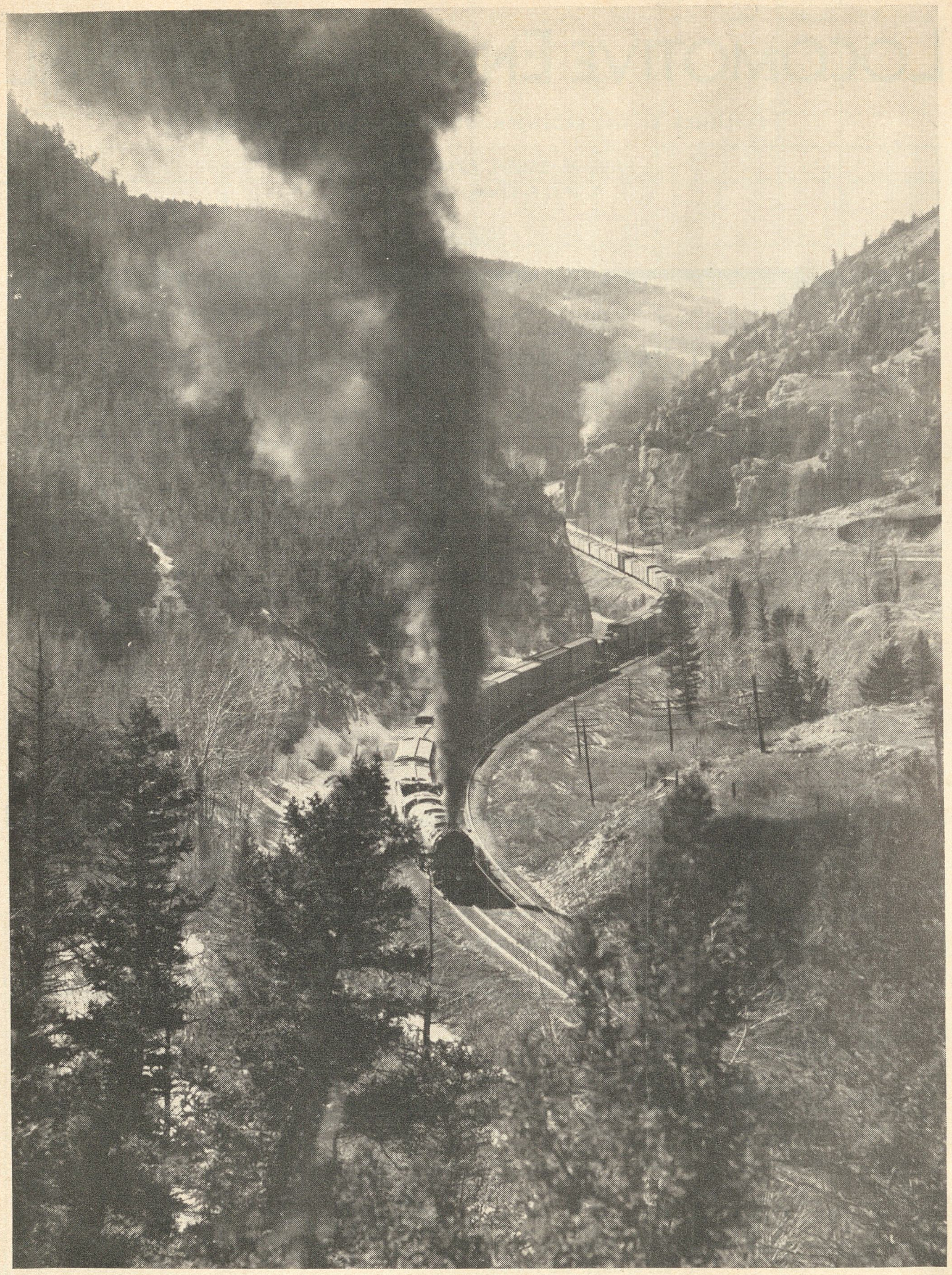


W. R. McGee.



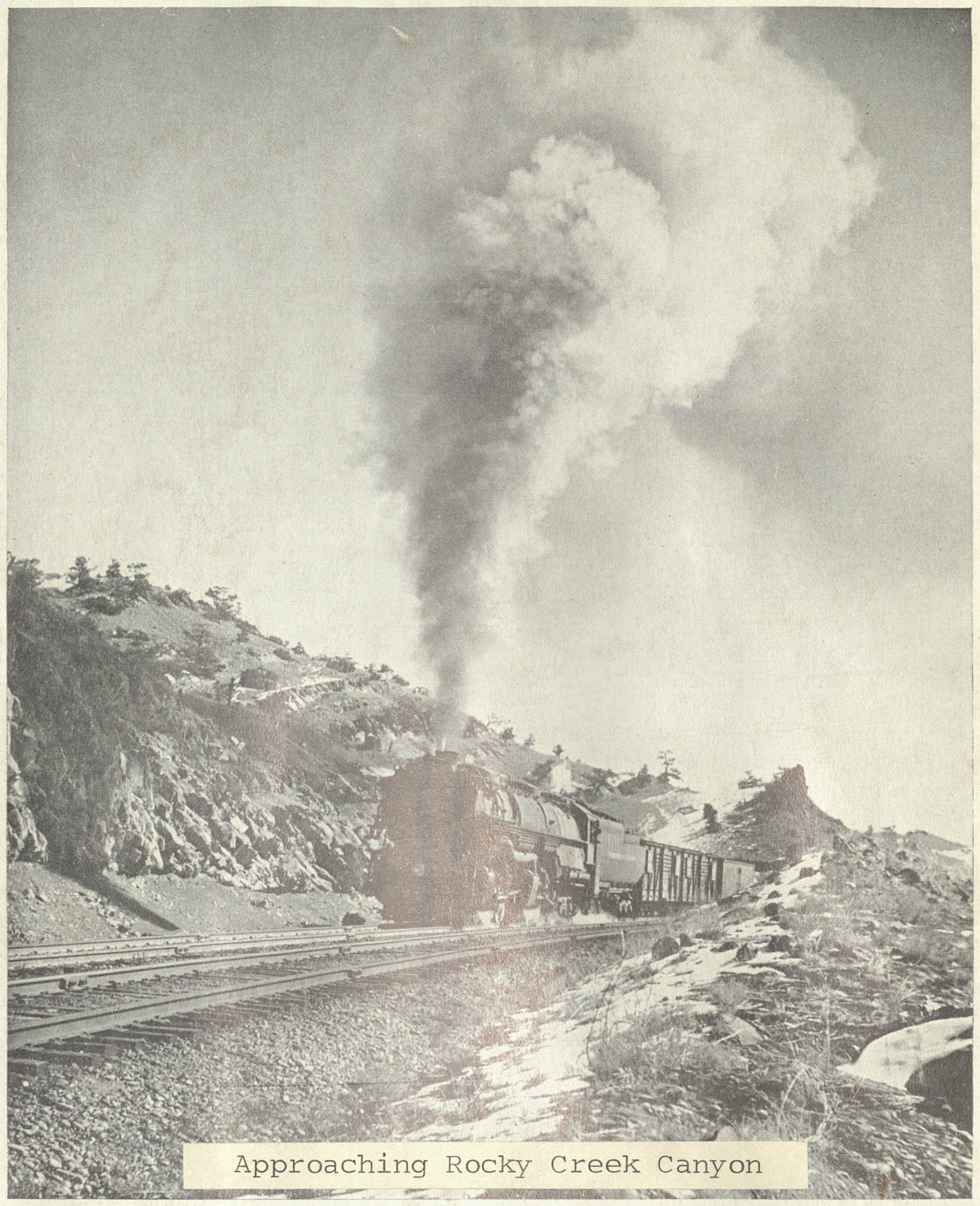
Copyright by Gifford & N. P. R. R. Co.

LEAVING GARDINER'S STATION FOR YELLOWSTONE NATIONAL PARK.



## SMOKE TRAILS IN THE MOUNTAINS

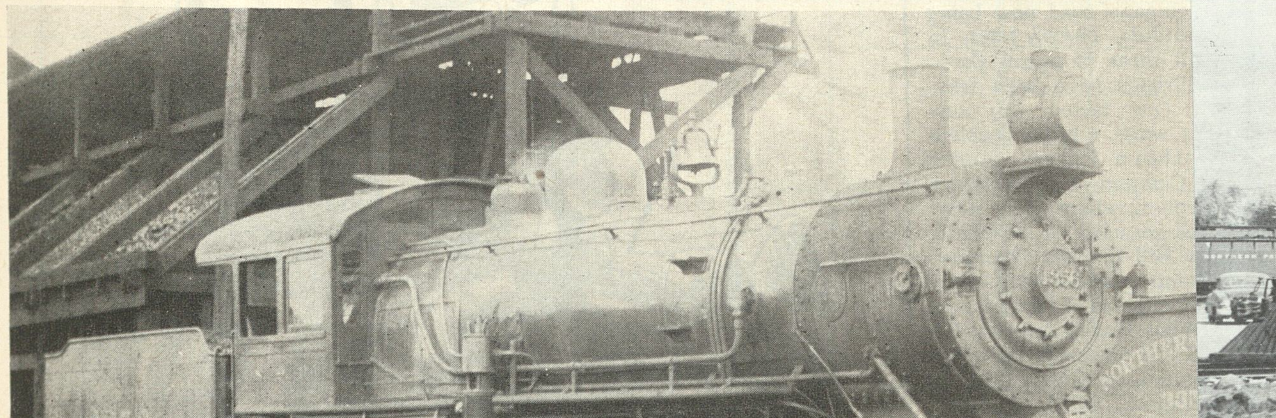
As this ~~east~~WESTbound Northern Pacific freight train climbs Rocky Canyon, just west of Chestnut, Montana, it leaves a heavy trail of smoke in whose wake a helper engine follows. Smoke of the helper engine can be seen in the distance.



Approaching Rocky Creek Canyon

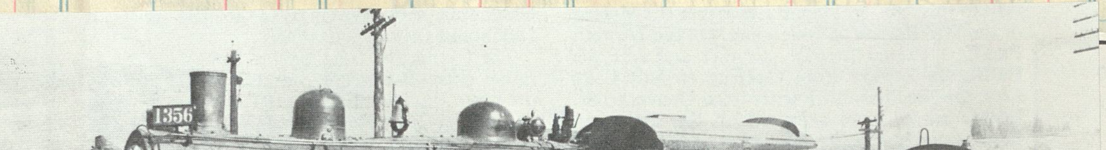
See page 53. E. R. Augustin Jr., Livingston, Mont.

ROCKY GATEWAY WHICH ROCK CREEK HAS CUT THROUGH THE MADISON LIMESTONE BELOW CHESTNUT, MONT., LOOKING EAST.

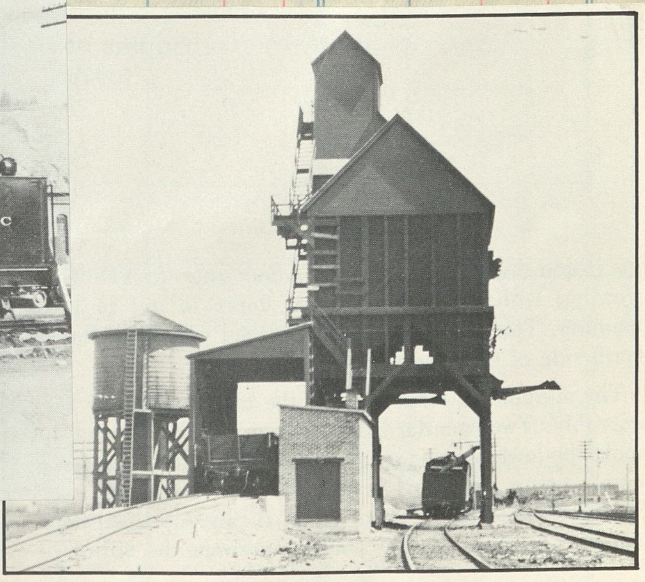


Delivered by Baldwin in 1902 as a Vauclain compound, No. 1356 was regularly assigned to the *North Coast Limited* between Missoula and Spokane.

After having rolled off 1,115,000 miles in 52 years of service, the 1356 was retired on June 16, 1954. Overhauled at So. Tacoma and placed on static display at Missoula November 1955.



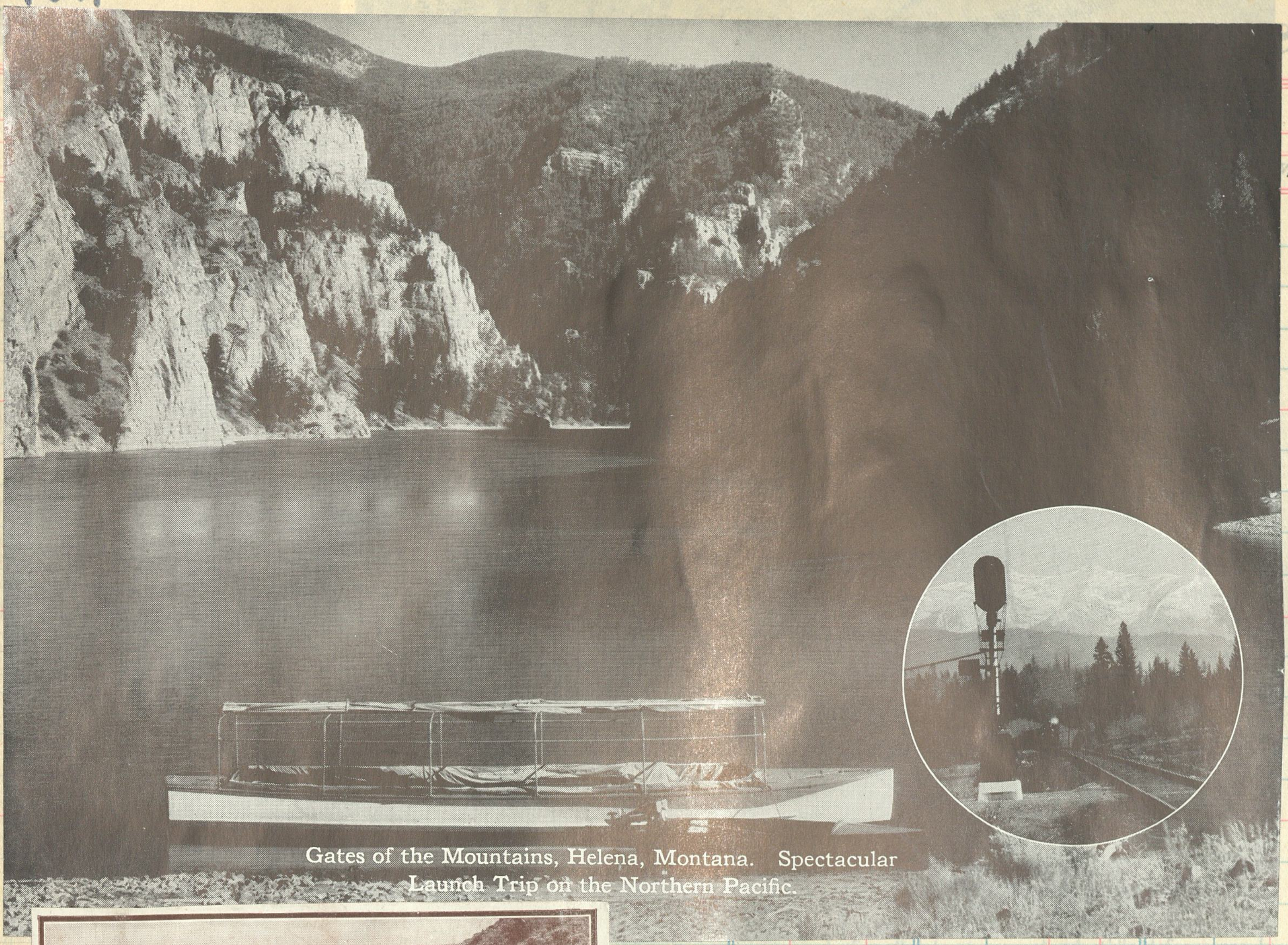
1350-1389 c/n 20309

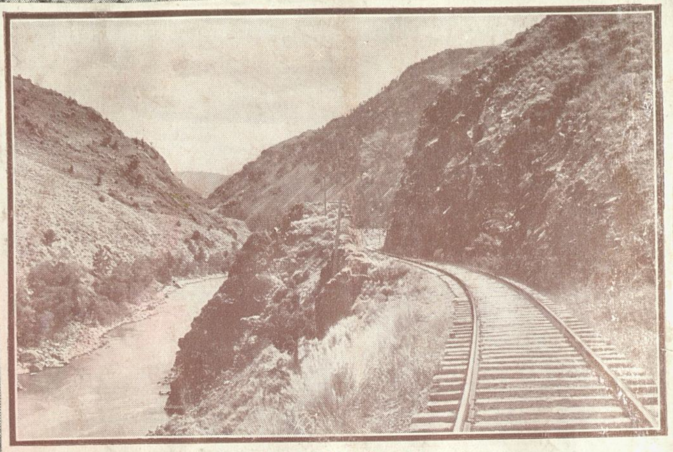


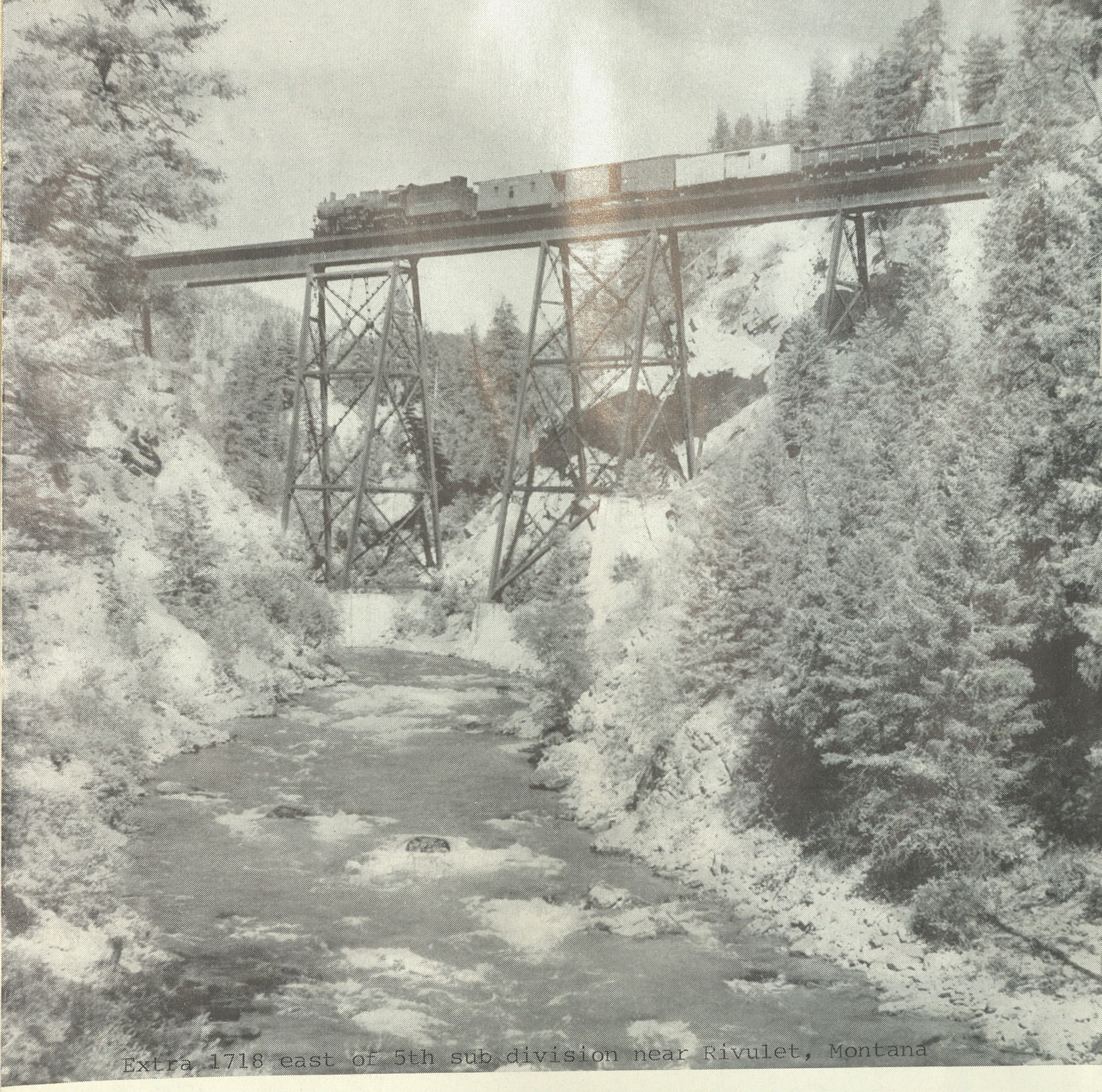
Bozeman, Mont.

| | | | |
|---|---|---|---|
| Class | S-4 | Heating surface | 2247 sq. ft. |
| Number | 1356 | Superheat surface | 485 sq. ft. |
| Builder | Baldwin | Rigid wheel base | 14 ft. 10 in. |
| Year | 1902 | Weight on drivers | 146,000 lbs. |
| Cylinders | 21 x 30 in. | Weight of engine | 194,850 lbs. |
| Drivers | 63 in. | Tractive effort | 35,700 lbs. |
| Grate area | 49.1 sq. ft. | Factor of adhesion | 4.09 |

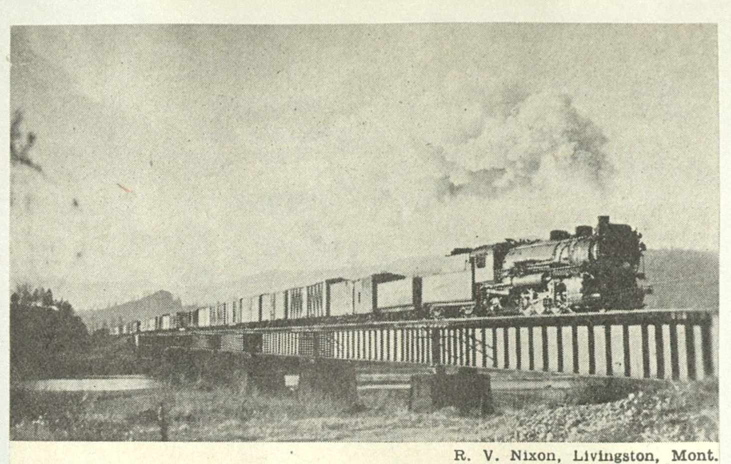
104


Gates of the Mountains, Helena, Montana. Spectacular Launch Trip on the Northern Pacific.

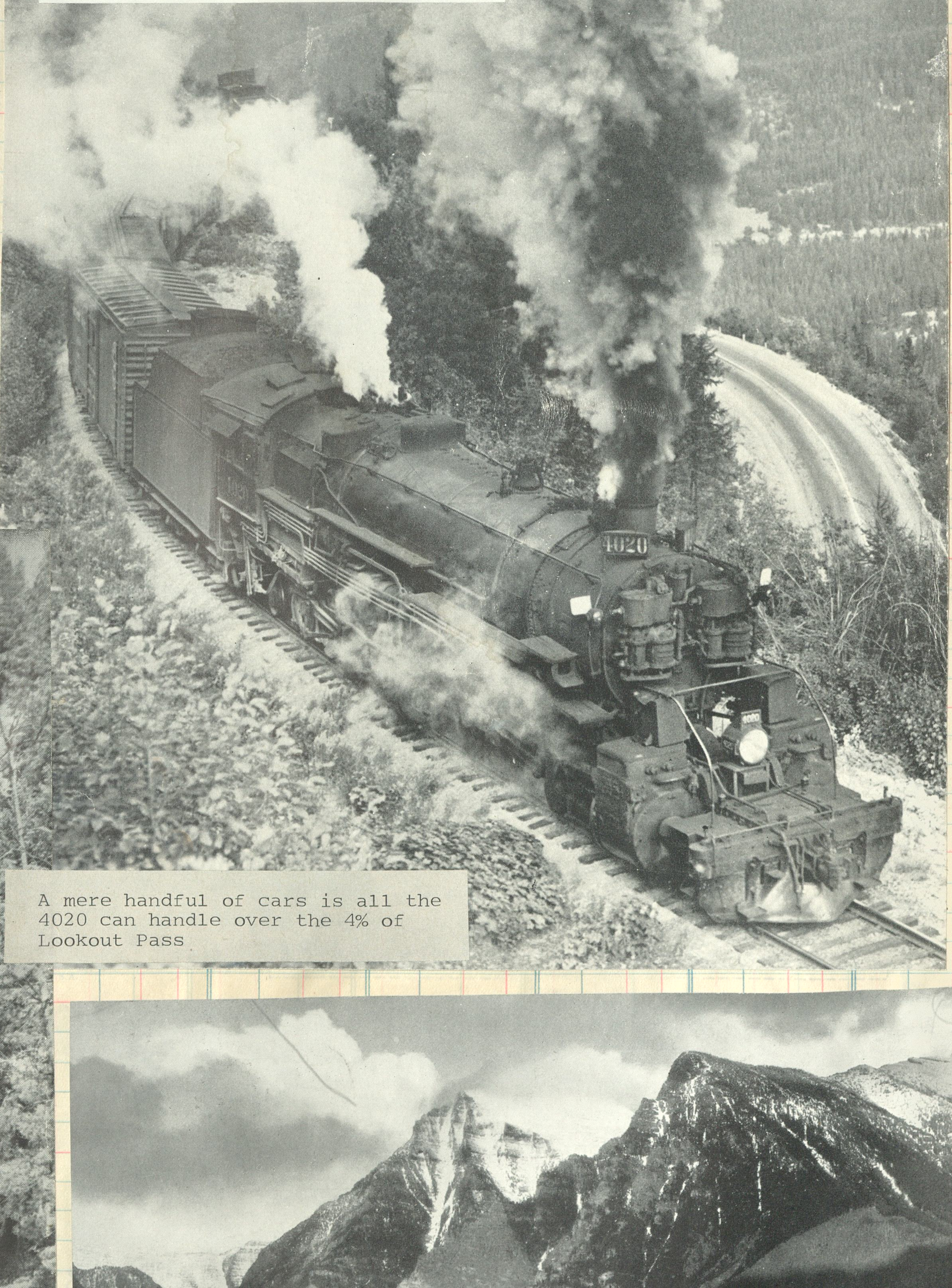

Yankee Jim Canyon

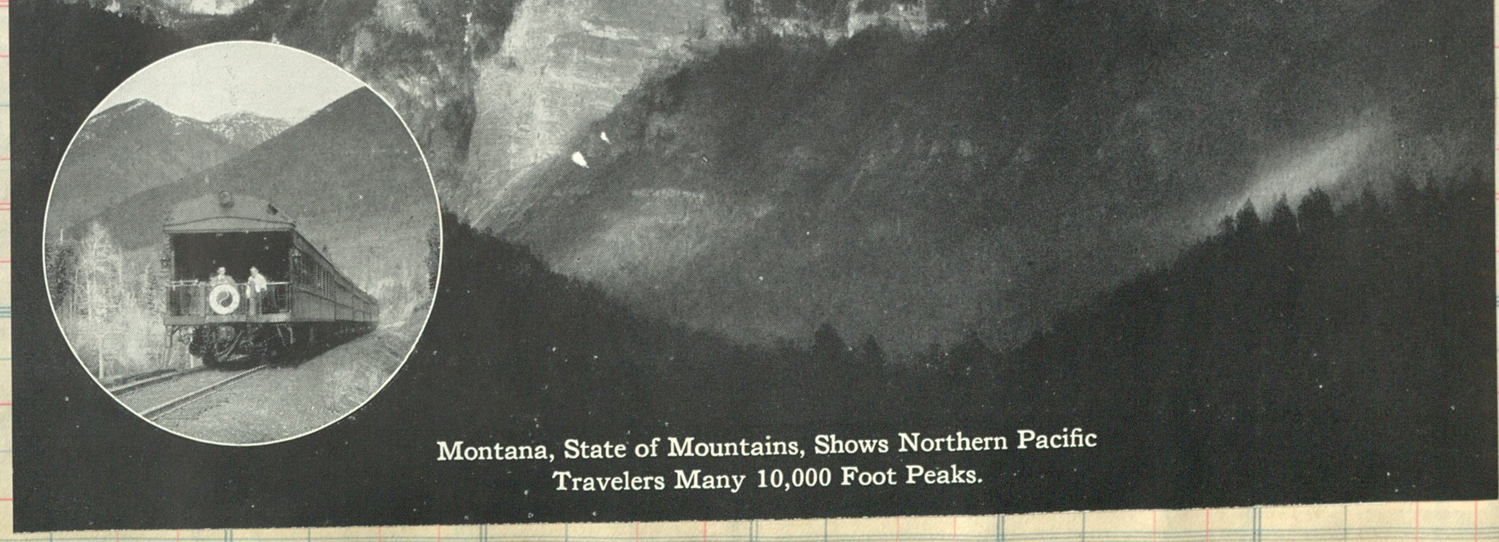

Extra 1718 east of 5th sub division near Rivulet, Montana

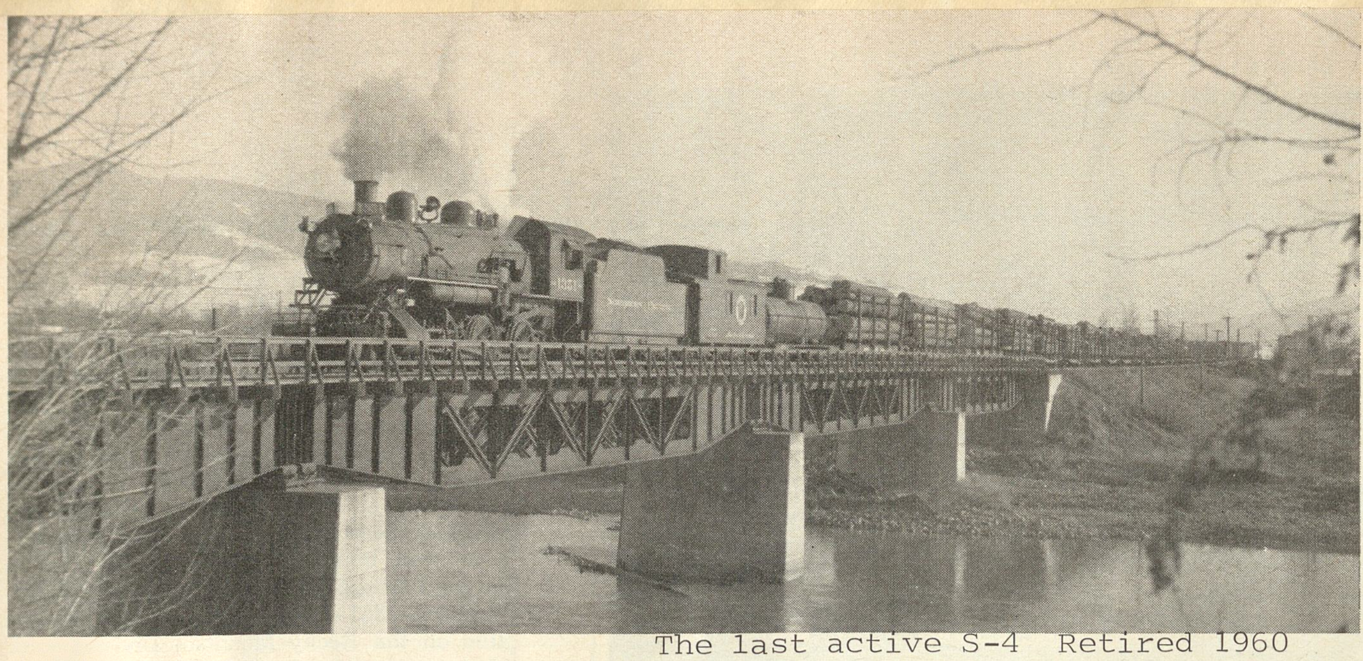
CROSSING FISH CREEK TRESTLE IN MONTANA


R. V. Nixon, Livingston, Mont.

X1844 xng Missoula R at Huson Mont

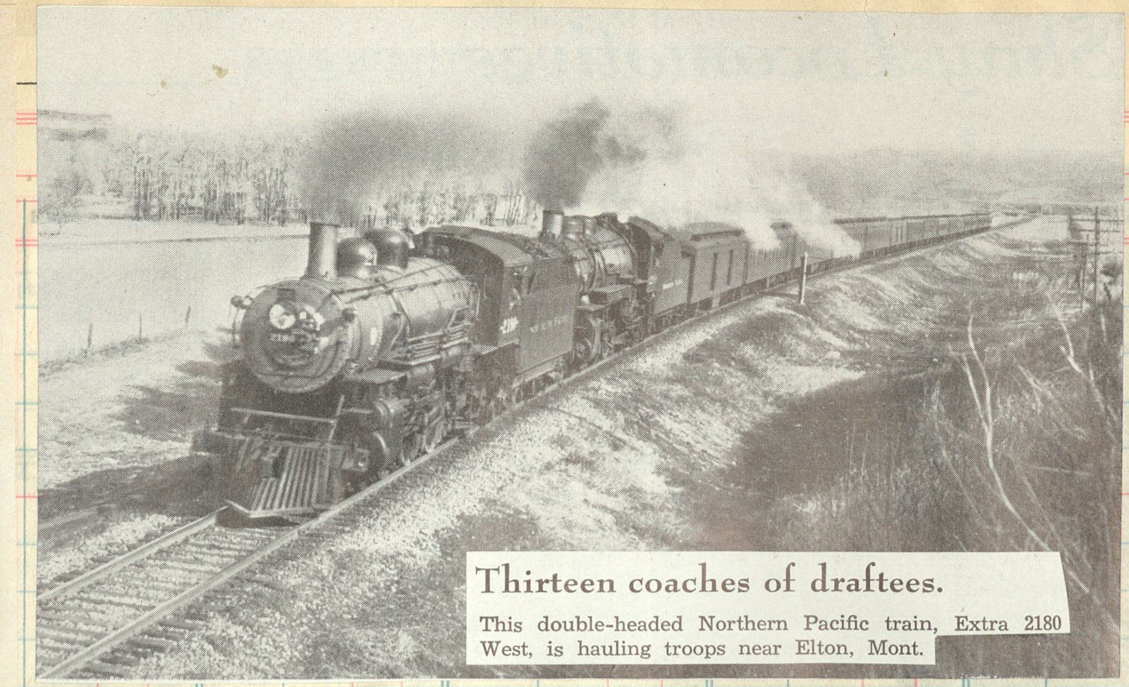

A mere handful of cars is all the 4020 can handle over the 4% of Lookout Pass


Montana, State of Mountains, Shows Northern Pacific Travelers Many 10,000 Foot Peaks.



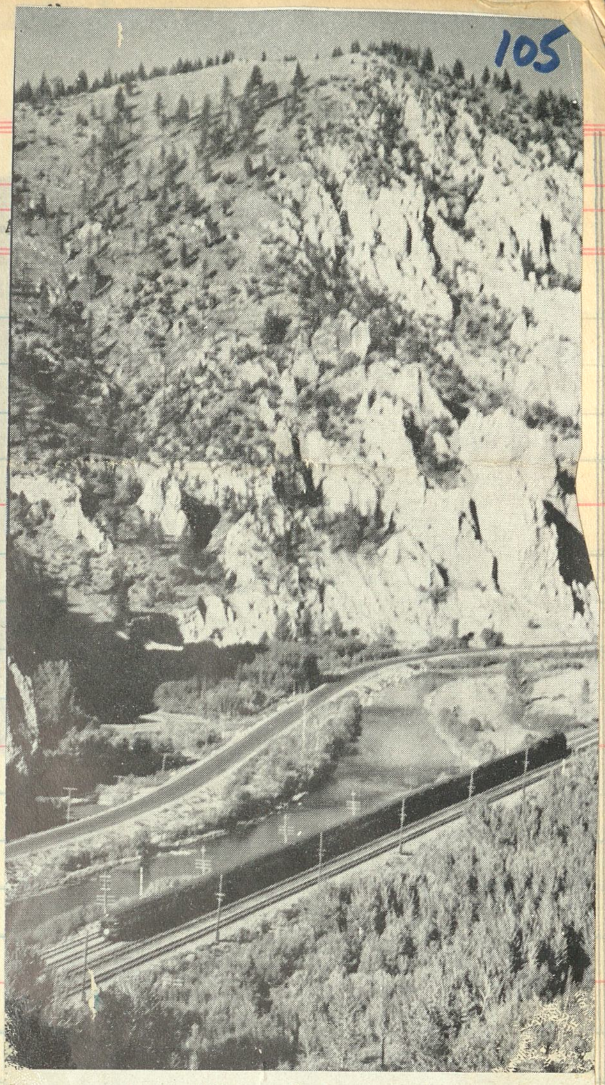
The last active S-4 Retired 1960

ONE of her last runs for NP finds the 1351 coming off the Bitter Root Branch and crossing Montana's Clark Fork River.

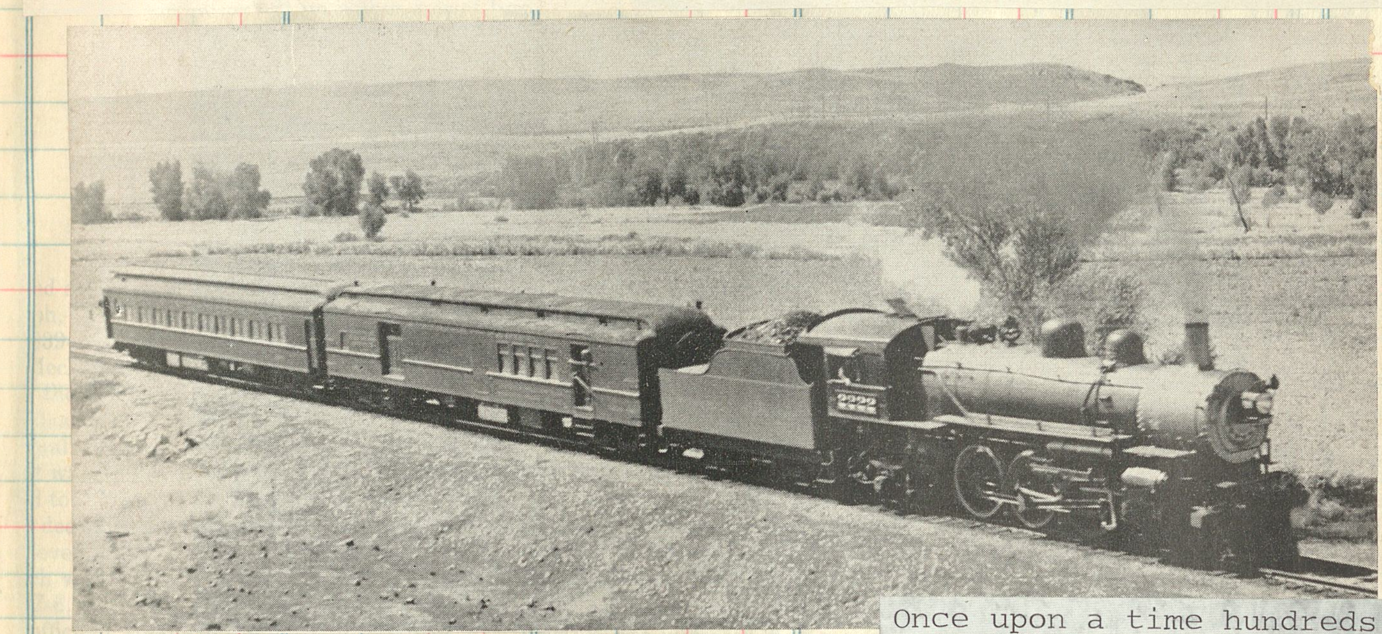


**Thirteen coaches of draftees.**

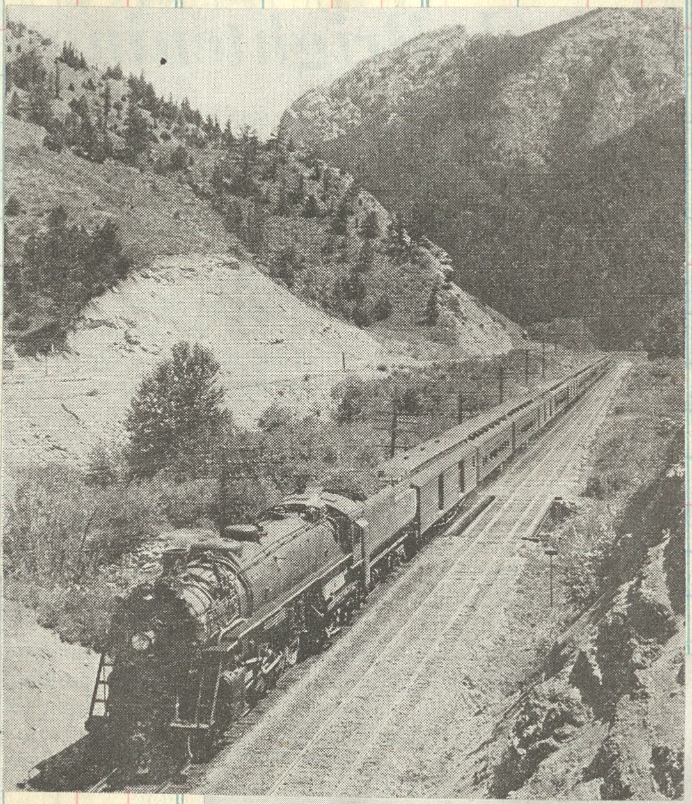
This double-headed Northern Pacific train, Extra 2180 West, is hauling troops near Elton, Mont.

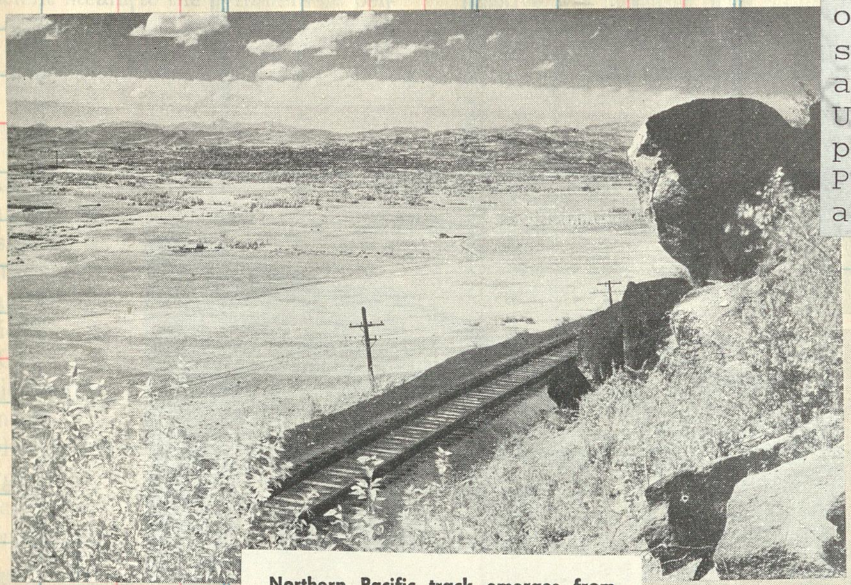


For over a thousand miles, travelers on the Northern Pacific e
grandeur of mountains and scenic rivers.

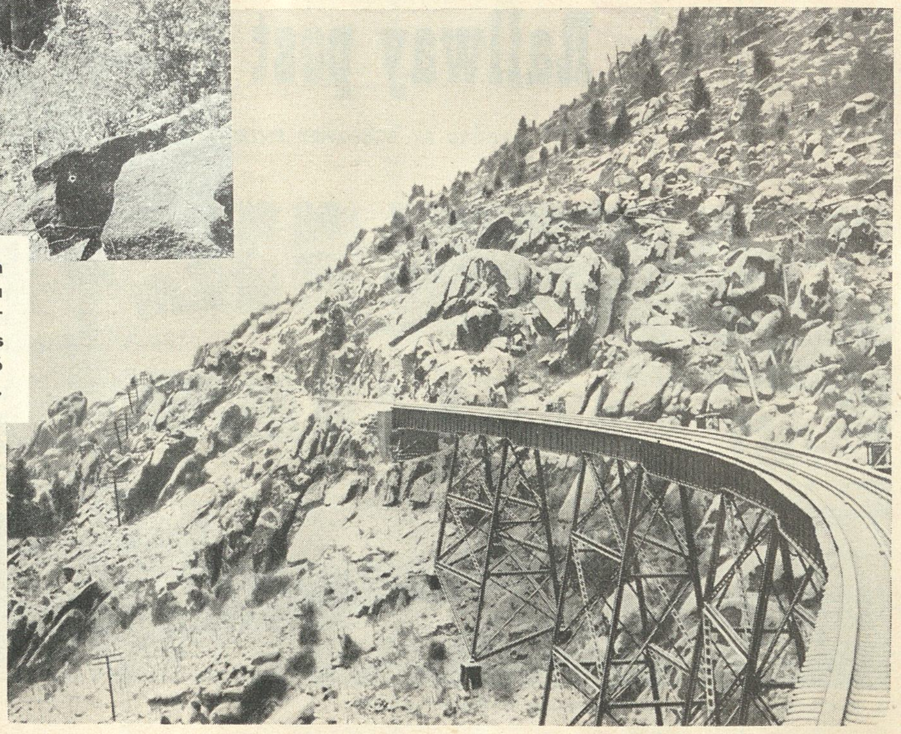


Once upon a time hundreds of little locals like this served countless hamlets and villages thruout the U.S.A. with reliable transportation. Here the lite Pacific "Four Duces" loafs along near Livingston



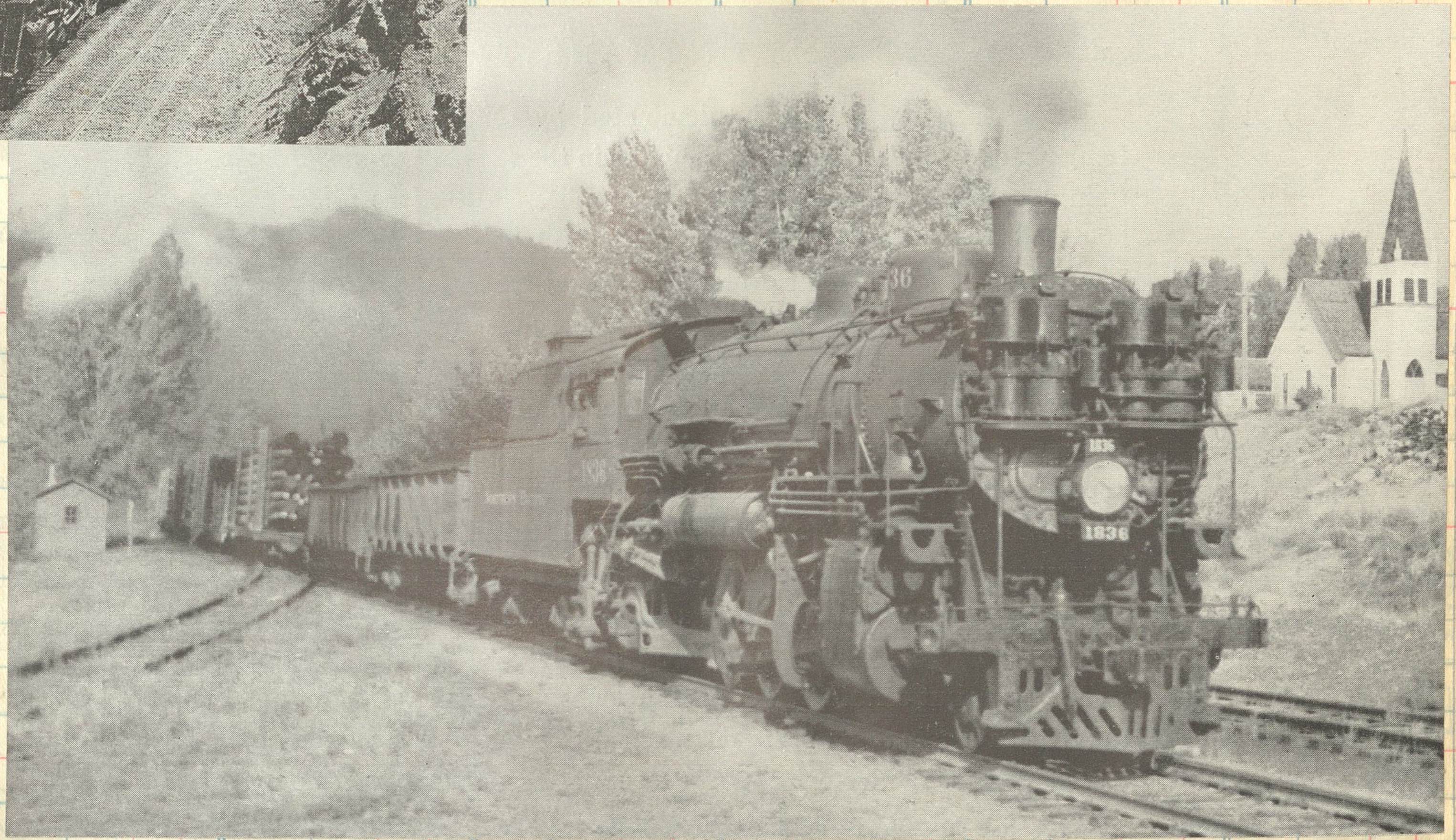


Northern Pacific track emerges from Homestake Tunnel 6328 feet above sea level and borders Silver Bow Valley← on the west side of the Divide. This is NP's southern route, built in 1896 to serve Butte, shown in the distance.



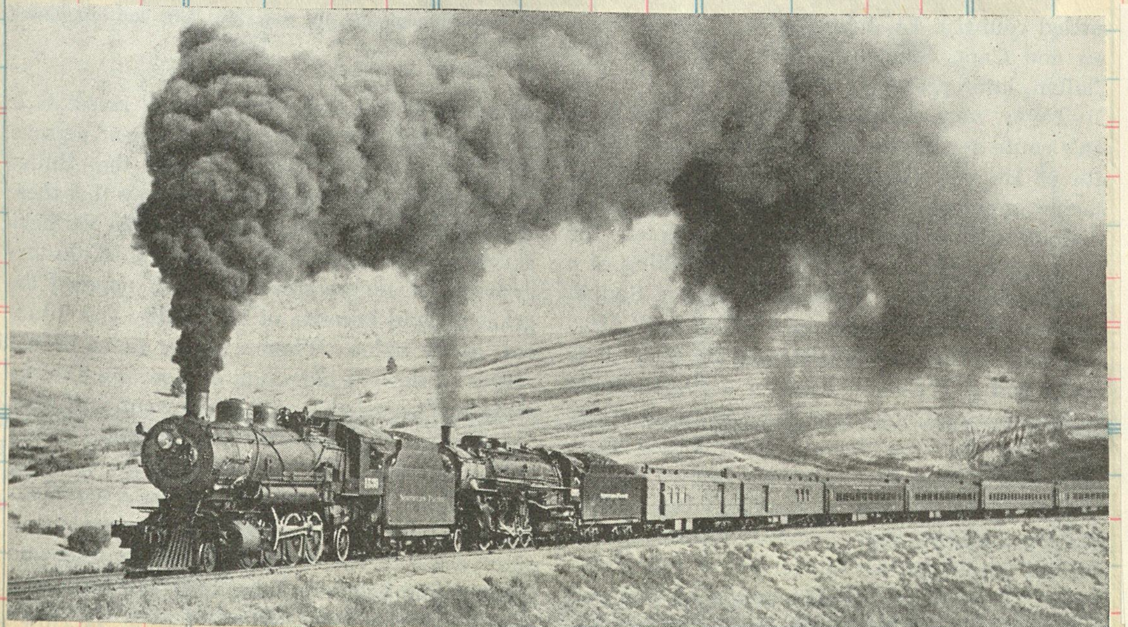
TRAINS & TRAVEL: George A. Gloff.

No. 1 conquers the Continental Divide and reaches Butte, Mont., on a single-track line that hangs to the rocky mountainside by the fingertips of its spidery, curving, snow-laden steel trestles.

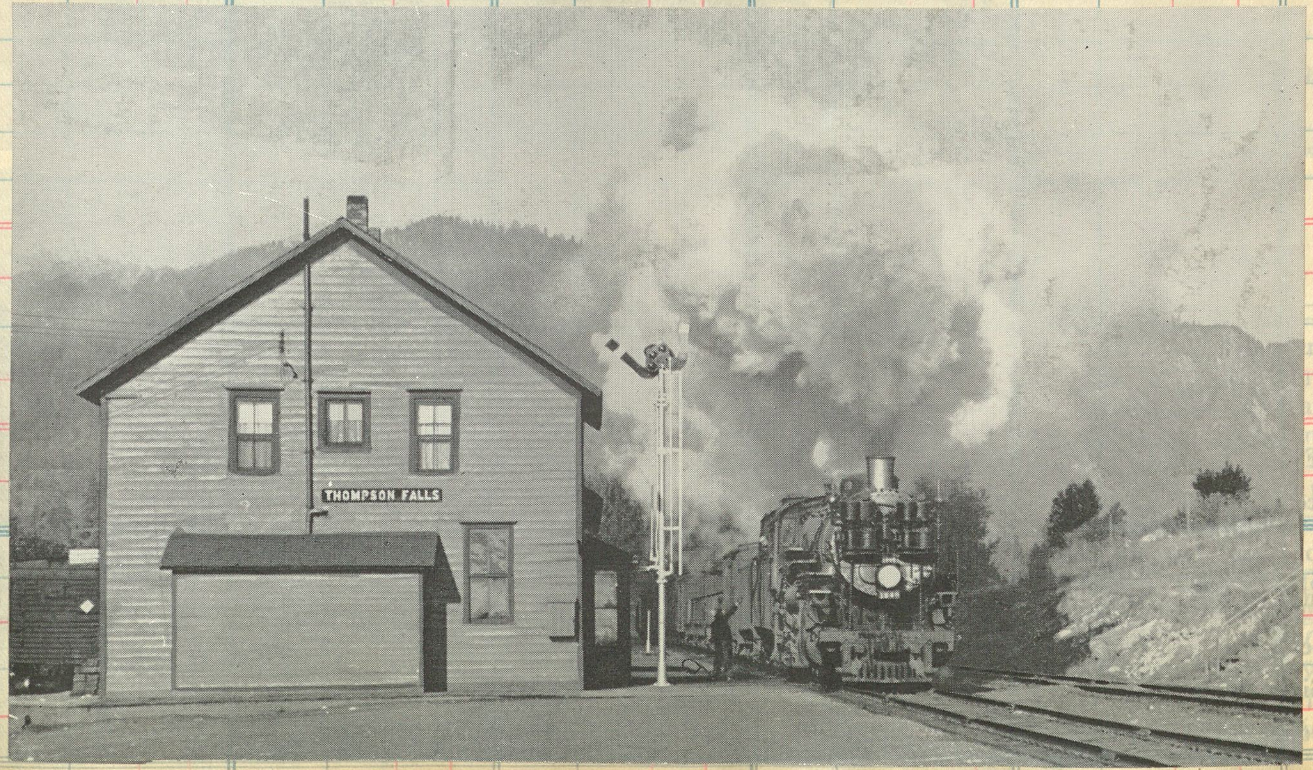


Thompson Falls, Montana, on the Clark Fork, once was a busy transfer point for the Mullan-Wallace mining area. Top, Mike 1836 rolls thru town and below the operator hoops up orders to Extra 1848

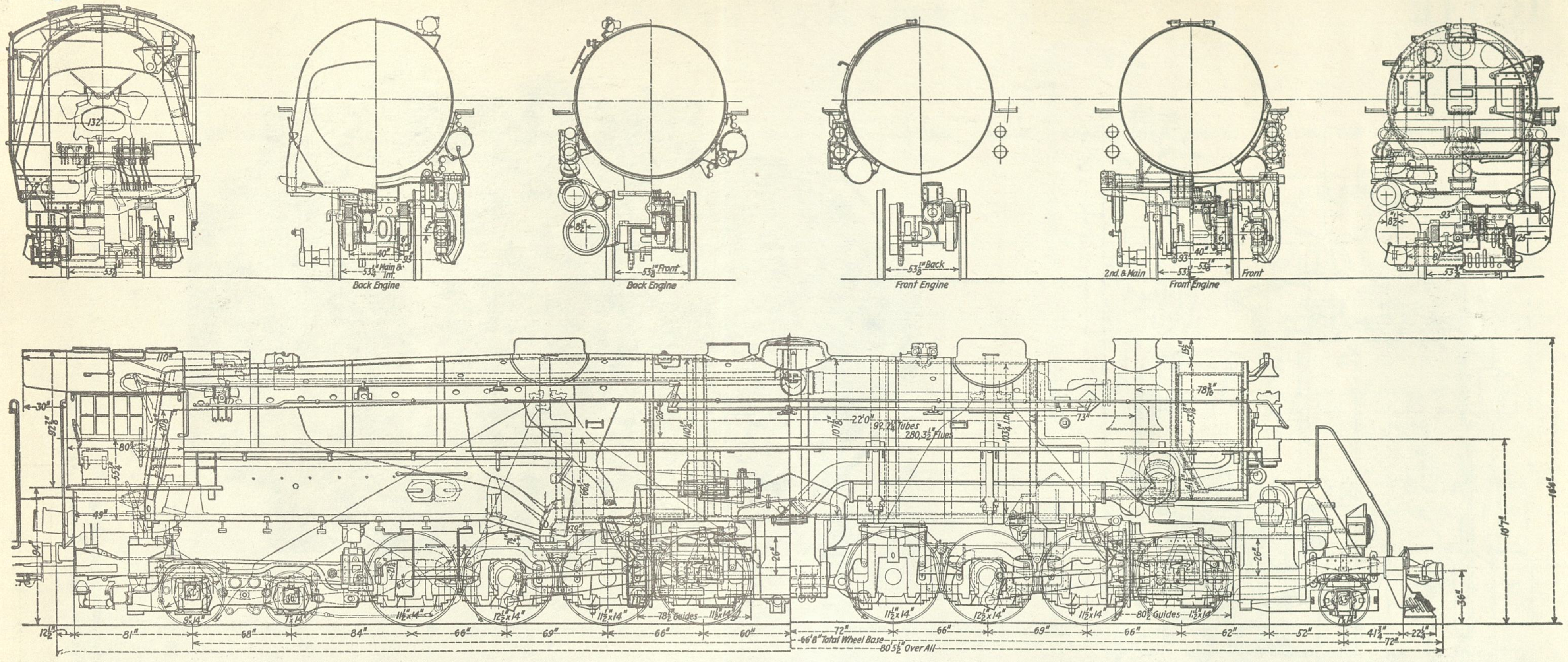
Mike 1536 and 4-8-4 #2607 working "down in the corner" lift No. 1 up 748 feet to Evaro

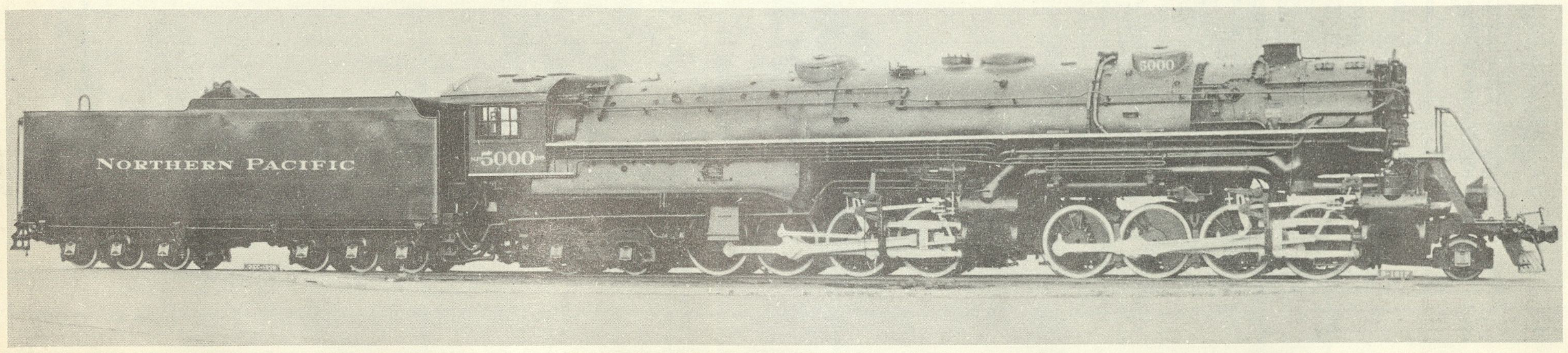


Homestake Tunnel is short, but it successfully knocks 136 feet off the peak of NP's southern crossing of the Divide. This is the west end of the bore.



106


Back Engine
Back Engine
Front Engine
Front Engine


NORTHERN PACIFIC
5000

c/n 67578 Northern Pacific single-expansion articulated freight locomotive No. 5000, Class Z-5, equipped with booster and designed for semi-bituminous coal. Built by the American Locomotive Company, Schenectady Works, in December 1928.

Schen 1928

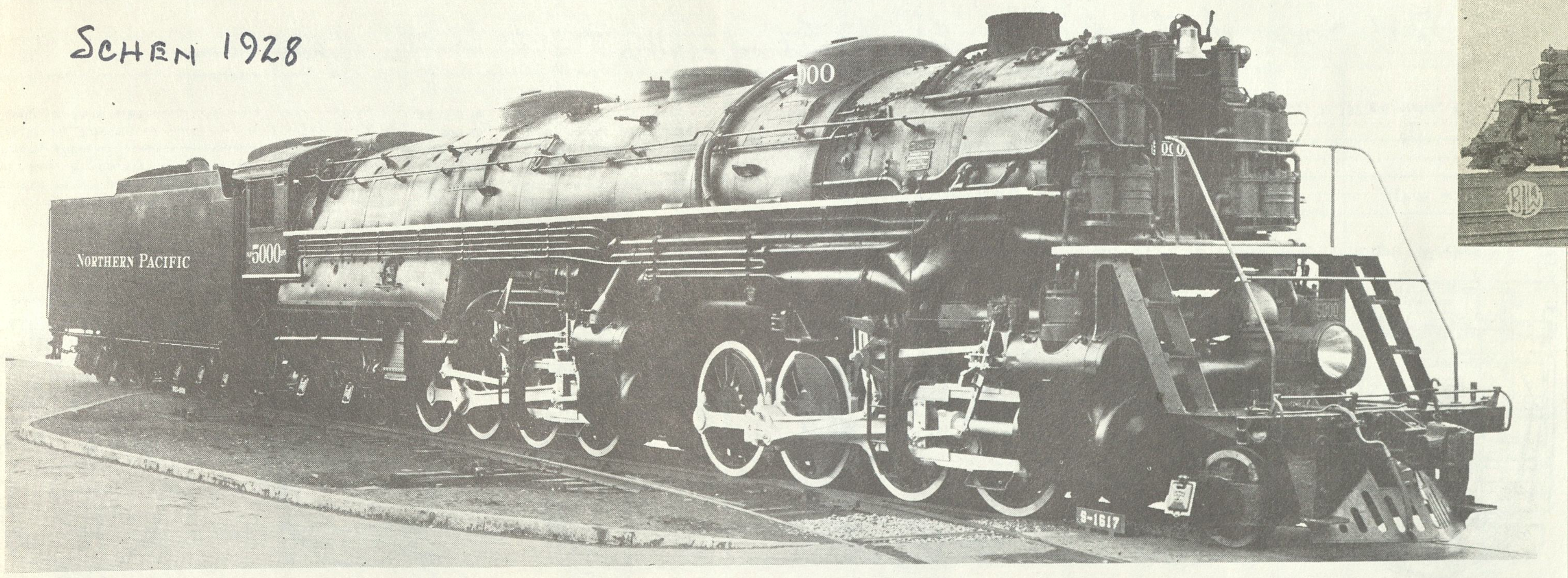
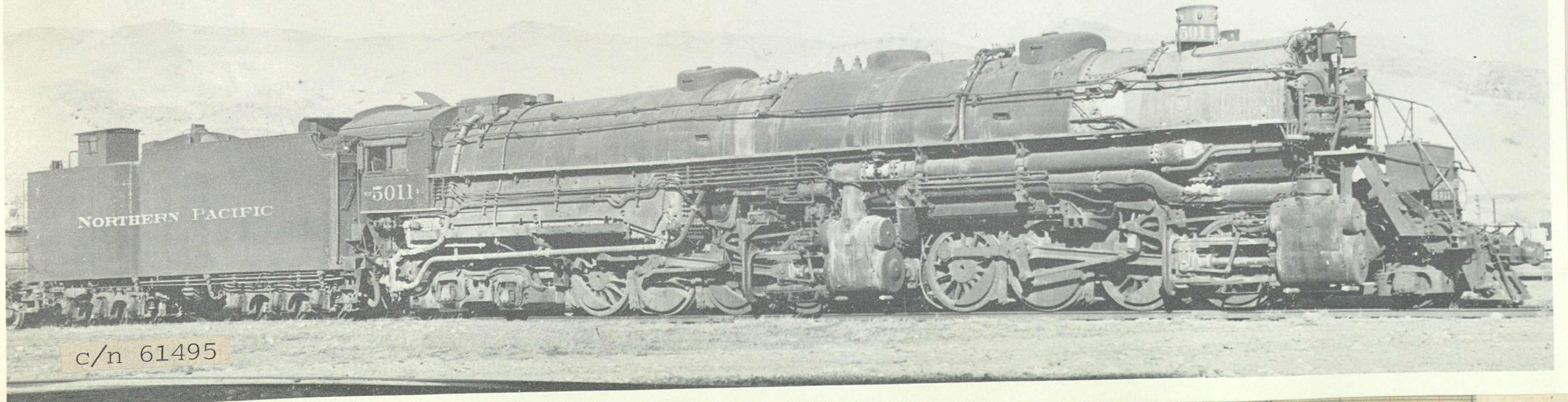
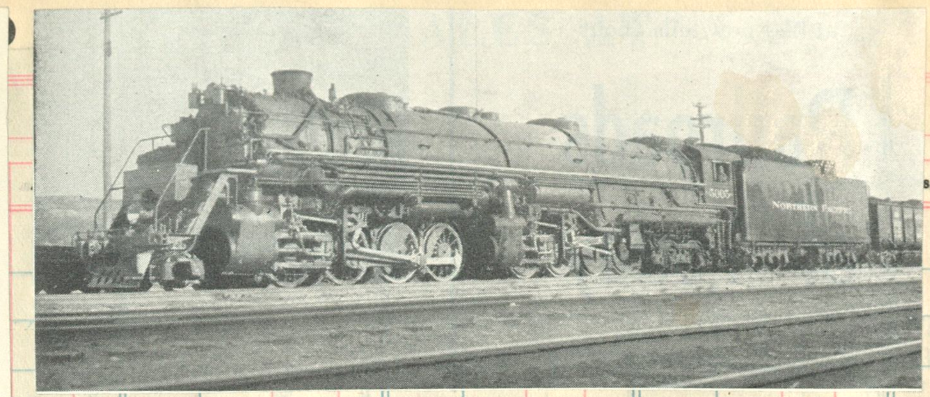

NORTHERN PACIFIC
5000

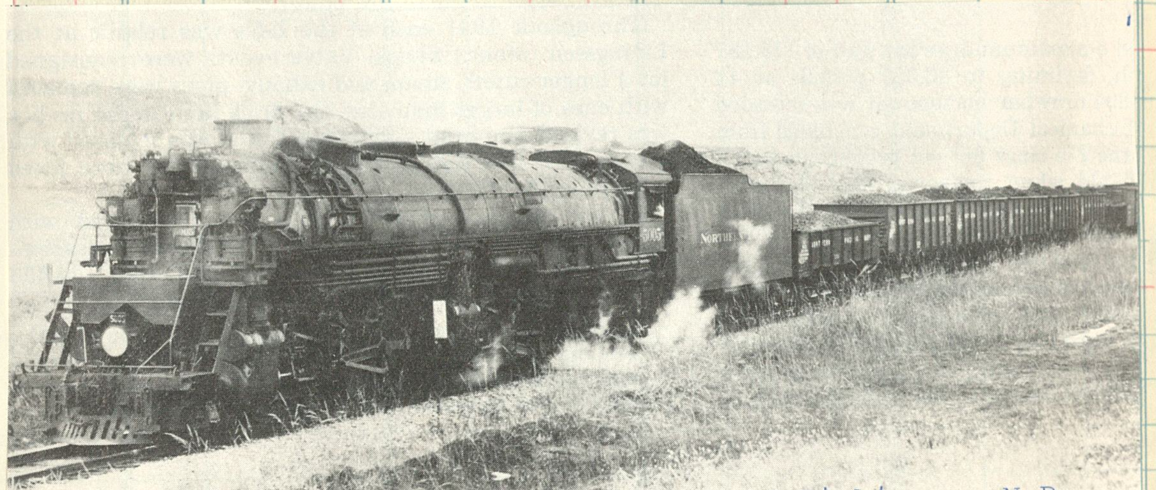
Fig. 151—Northern Pacific 2-8-8-4 (Yellowstone Type) Single-Expansion Articulated Locomotive, Class Z-5, for Heavy Freight Service. Equipped with Booster and Designed for Semi-Bituminous Coal. Built by the American Locomotive Company.

"Yellowstone" type 5001-5011 built by Baldwin 1930 Cyls (4)26x32 dvs 63 wt 723,400 TE 153,400#


NORTHERN PACIFIC
5011

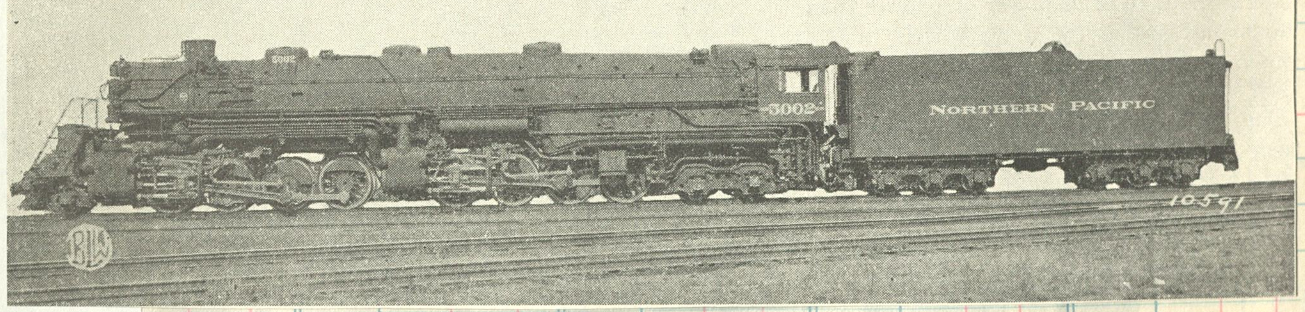
c/n 61495

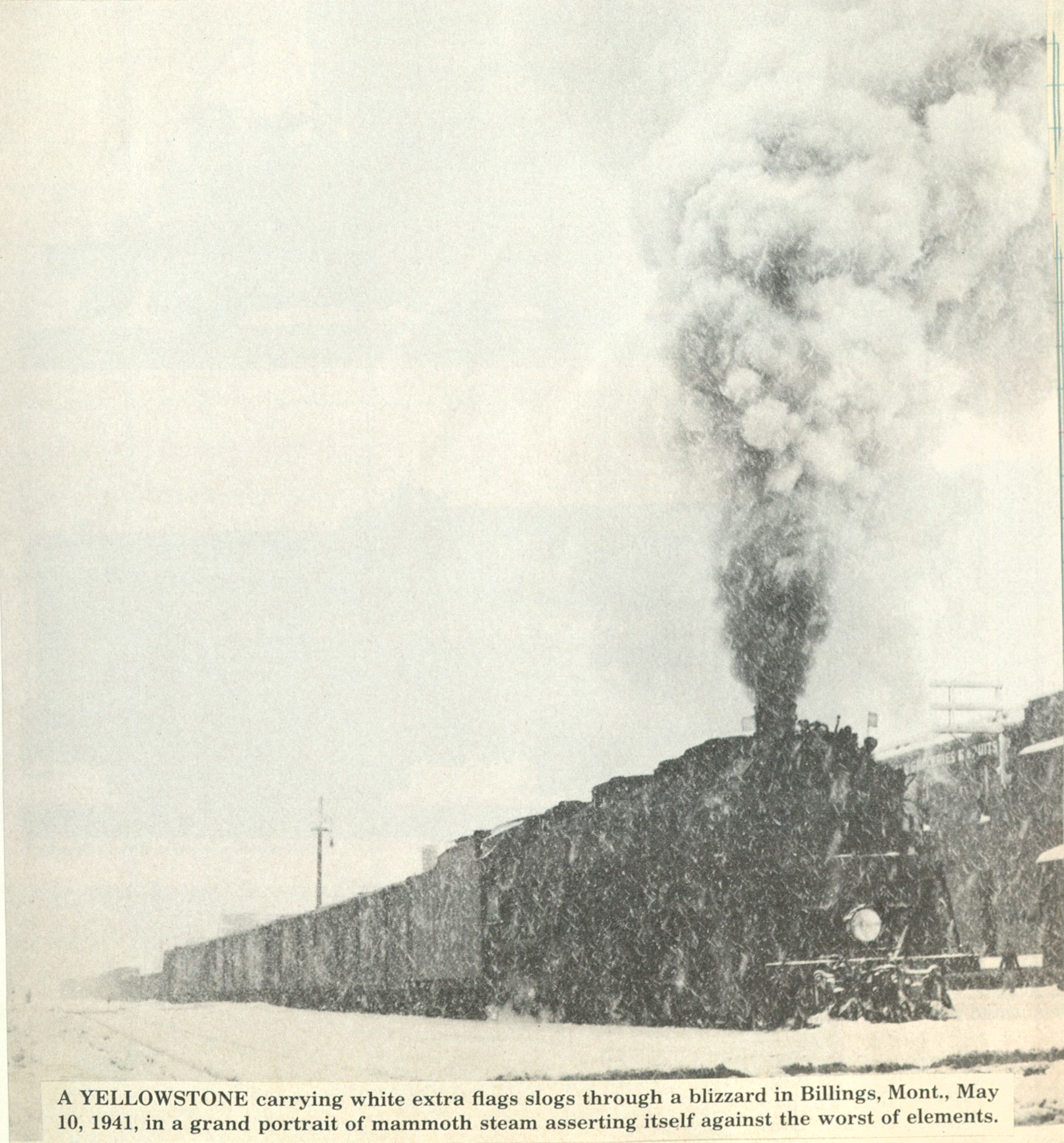




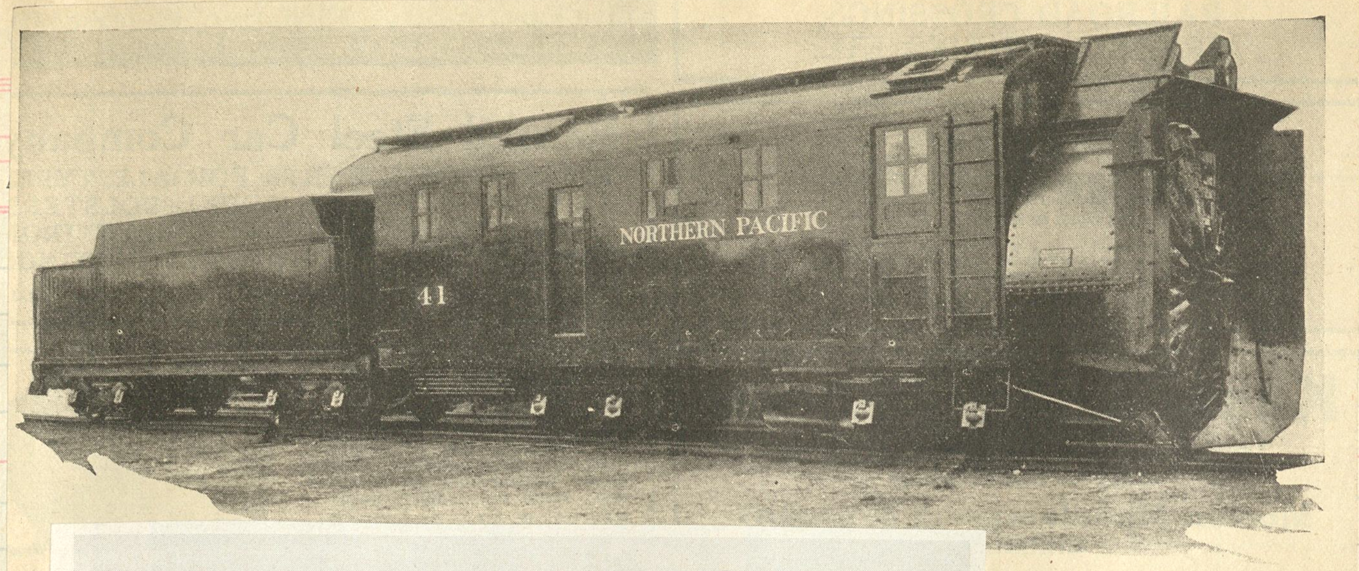
5005 west of Dickinson, N.D.

5001-5011 Baldwin 1930

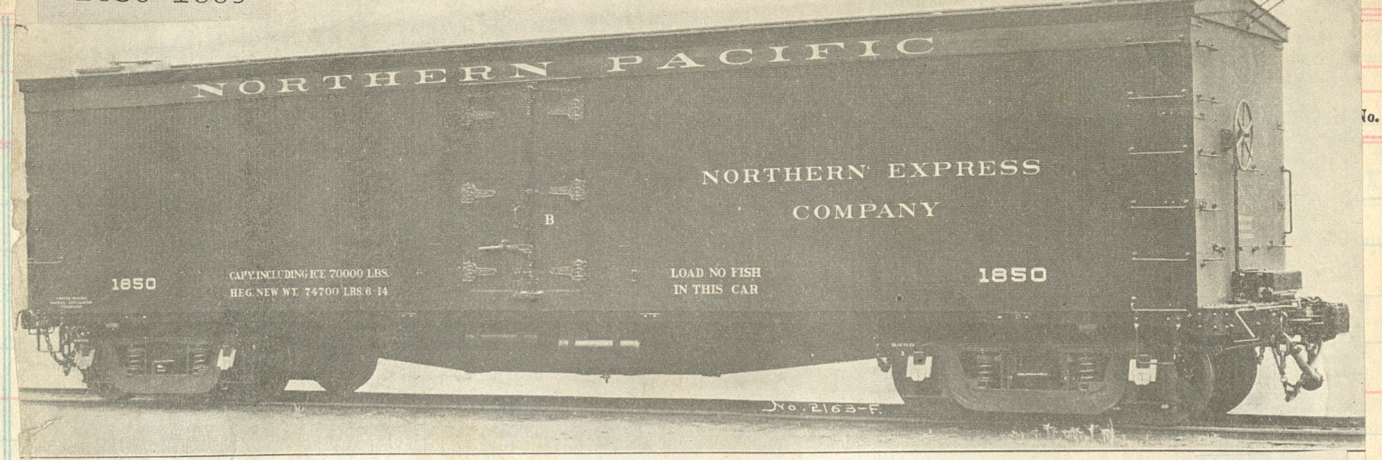

NORTHERN PACIFIC
5002
10591



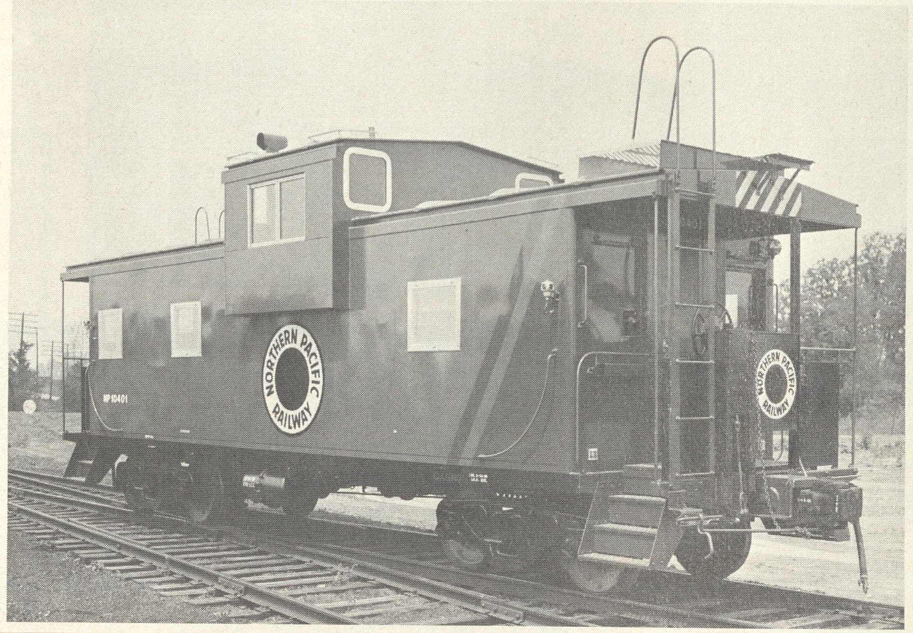
A YELLOWSTONE carrying white extra flags slogs through a blizzard in Billings, Mont., May 10, 1941, in a grand portrait of mammoth steam asserting itself against the worst of elements.

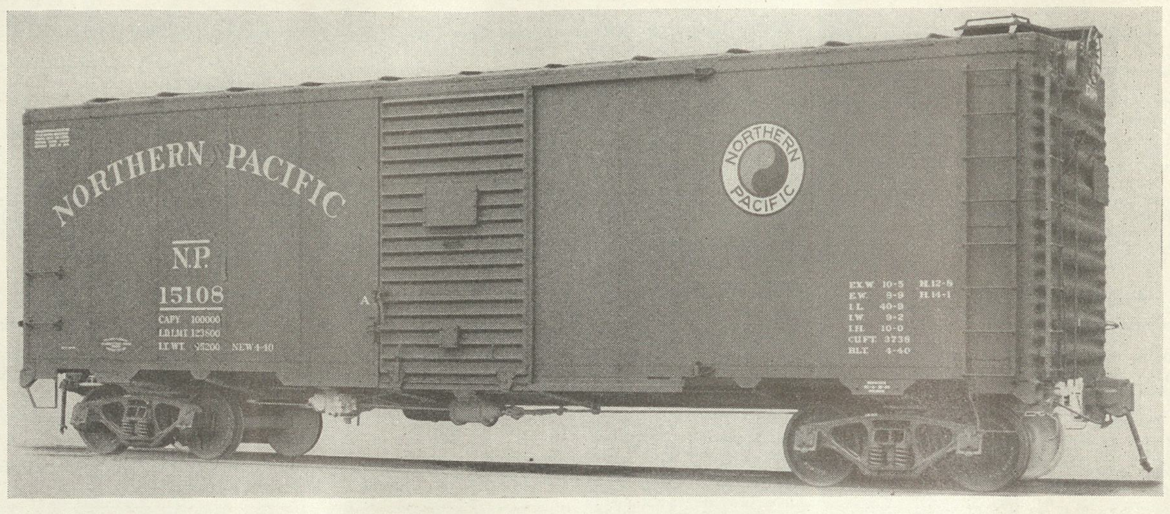

NORTHERN PACIFIC
41

1850-1889

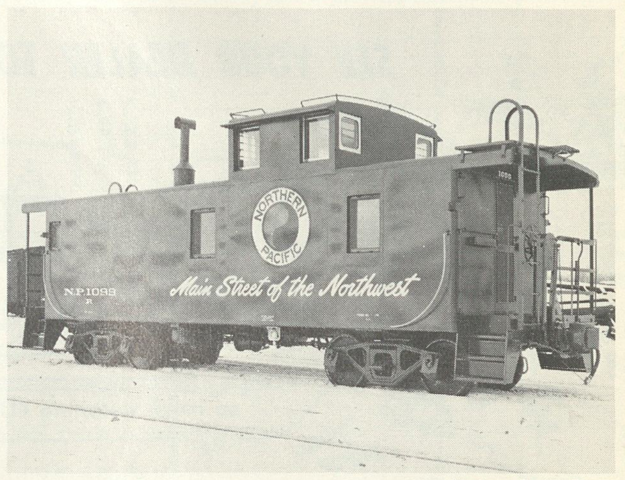

NORTHERN PACIFIC
NORTHERN EXPRESS COMPANY
1850
LOAD NO FISH IN THIS CAR
1850

1914 Northern Pacific Express Refrigerator Car OKM


NORTHERN PACIFIC RAILWAY


NORTHERN PACIFIC
N.P.
15108

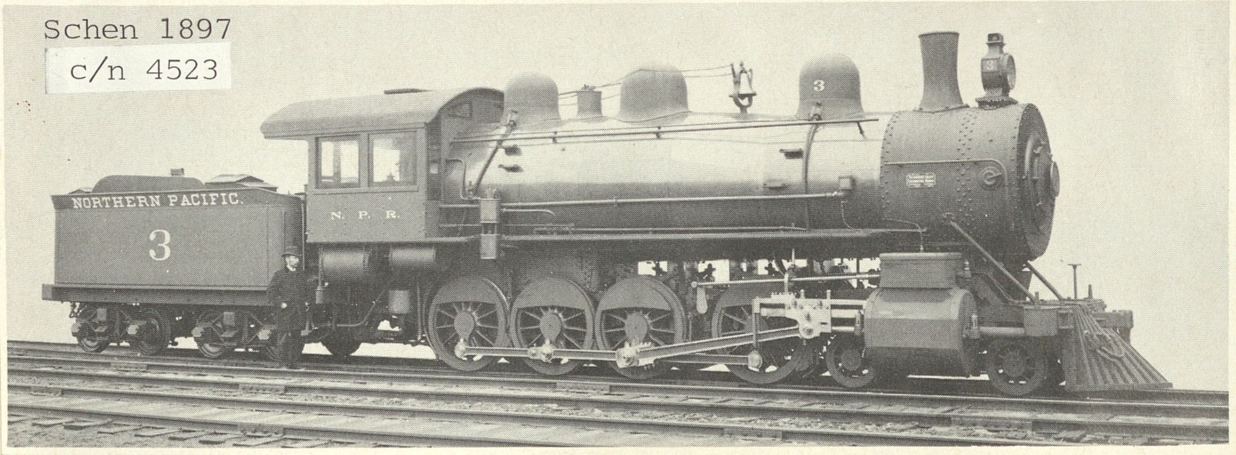
A 50-Ton Steel Box Car Built by the Pullman-Standard Manufacturing Company 1940


Main Street of the Northwest

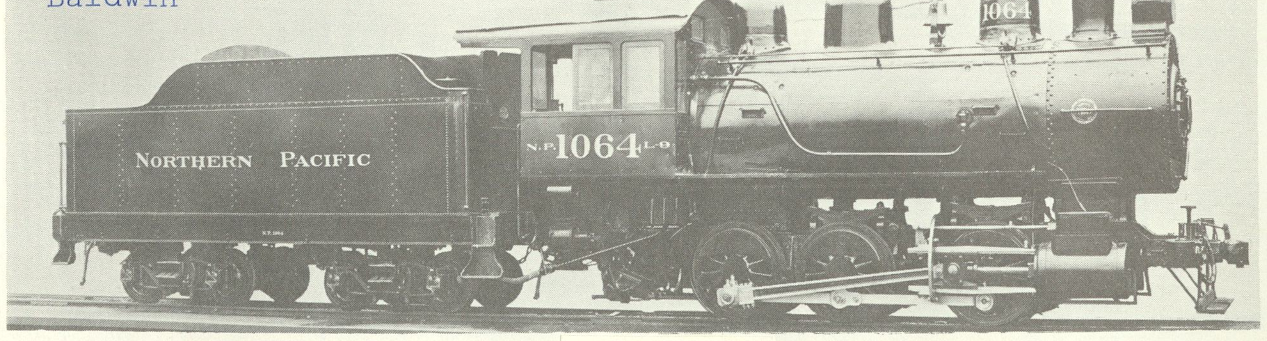
Northern Pacific Photo

Northern Pacific 'steel' caboose #10050-10099.

Schen 1897
c/n 4523


NORTHERN PACIFIC
3
N. P. R.

1050-1064
Baldwin


NORTHERN PACIFIC
1064

Northern Pacific #1064, 1907, 0-6-0 type. c/n 29957

1174-1193 Class G-2
Brooks 1920

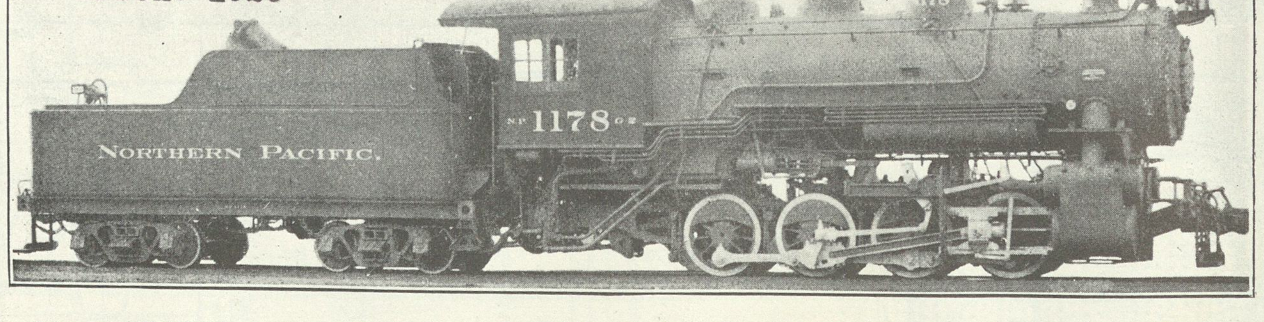
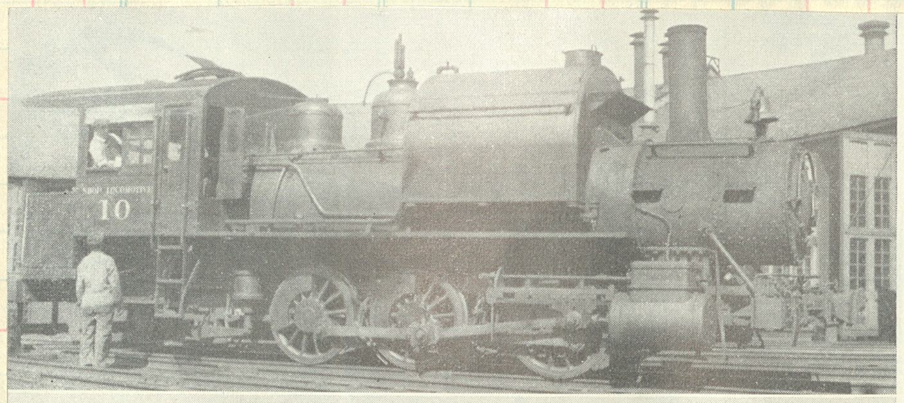
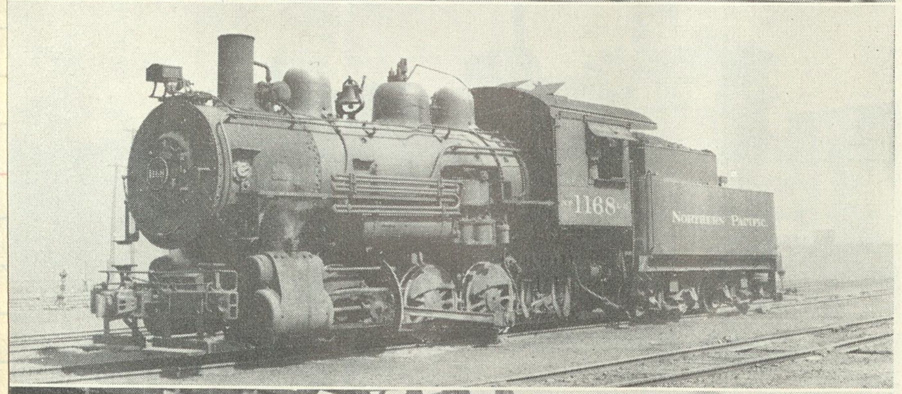

NORTHERN PACIFIC
1178

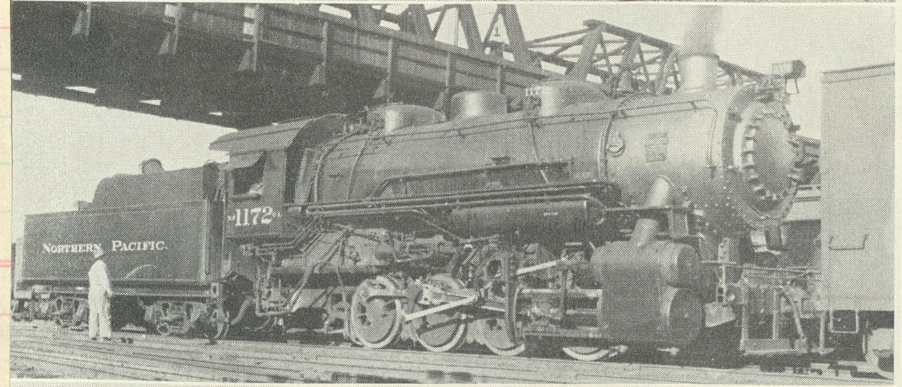
**Fig. 21**—Eight-Wheel (0-8-0) Locomotive for Switching Service. Built for Northern Pacific by the American Locomotive Company.

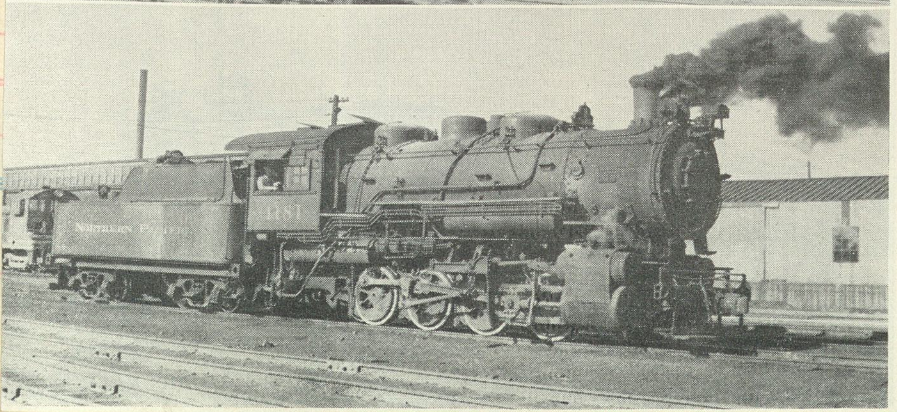
c/n 62477

| | | | |
|---|---|---|---|
| Gage | 4 ft. 8½ in. | Tubes, Length | 15 ft. |
| Cylinders | 24 in. x 28 in. | Heating Surface, Tubes | 1,785 sq. ft. |
| Steam Pressure | 175 lbs. | Heating Surface, Firebox | 185 sq. ft. |
| Diameter of Drivers | 51 in. | Heating Surface, Superheater | 652 sq. ft. |
| Tractive Effort | 51,000 lbs. | Weight on Drivers | 217,000 lbs. |
| Rigid Wheel Base | 15 ft. | Weight Engine and Tender | 380,000 lbs. |
| Total Wheel Base | 15 ft. | Tank Capacity | 800 gals. |
| Total Engine and Tender Wheel Base | 53 ft. ½ in. | Fuel | Coal |




1168
NORTHERN PACIFIC


NORTHERN PACIFIC
1172



## SWITCHERS

### L-4 Shop Saddletanker

No. 10 has the distinction of being the oldest locomotive on the Northern Pacific. It was built as a standard six-wheel shifter by Baldwin in 1896 for the old St. Paul & Duluth, was later renumbered 927, and finally was rebuilt into a saddletank and given its present number. It is employed at the Brainerd (Minn.) shops. The small bunker carries coal for short shop moves.

### L-10 Six-coupled

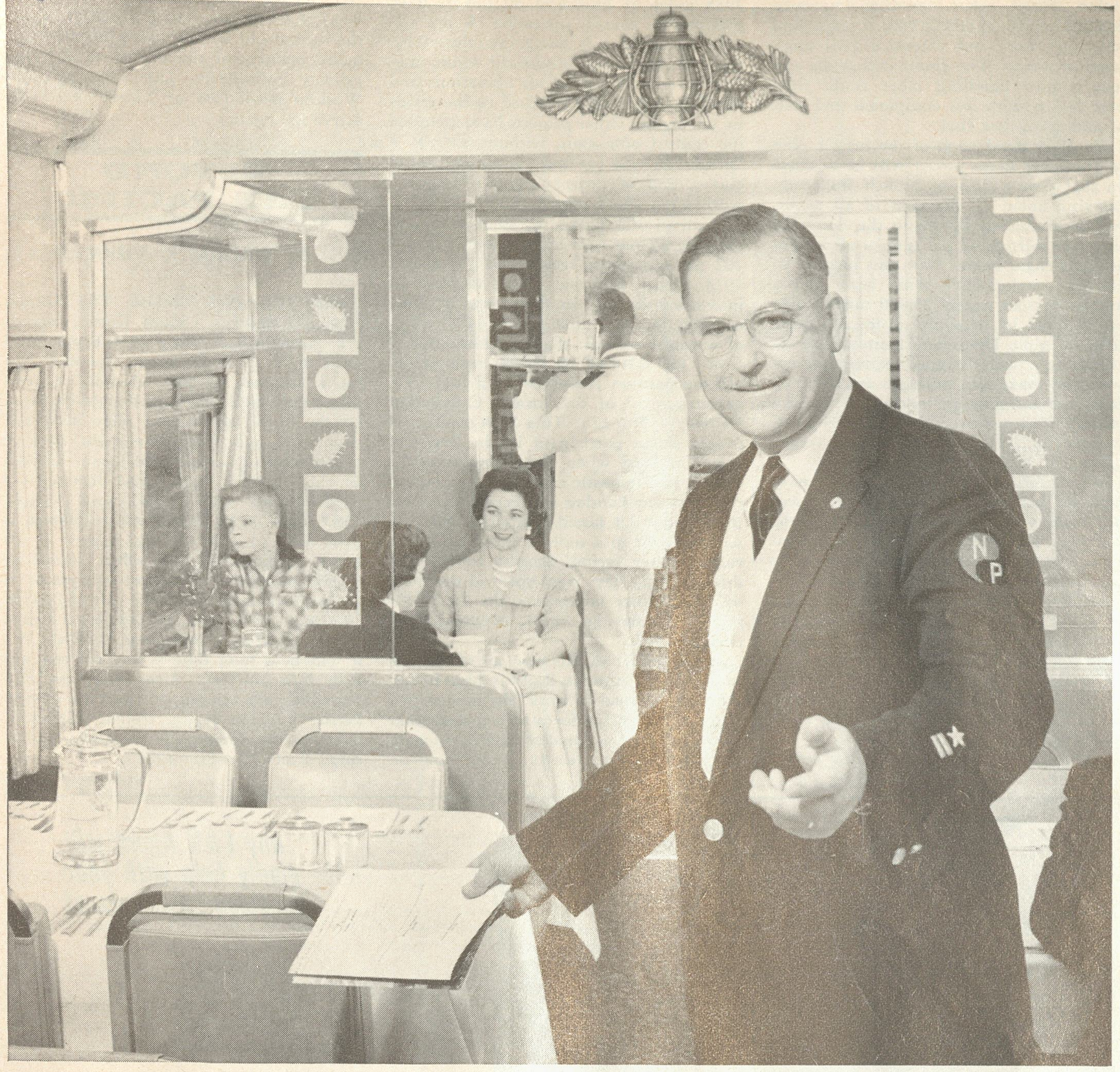
No. 1168, one of 10 L-10 switchers built for the NP by Schenectady in 1912, is typical of a hundred thousand little 0-6-0's delivered to the bustling yards of American roads in the early 1900's; yet this sturdy engine is rendered "NP" on first sight by her unique headlight jacket. The engines of class L-10, which have piston valves and Stephenson gear, are all in service.

### G-1 Eight-coupled

U.S.R.A. locomotives very seldom found their way into the Far West; the bulk of them were delivered to carriers in the East, South and Midwest. However, four of these G-1 class U.S.R.A. 0-8-0's, built by Brooks in 1919, were dispatched to the Northern Pacific and all are still very much in service. No. 1172, shown in St. Paul, is equipped with a tender coal pusher.

### G-2 Eight-coupled

Success in locomotives is reflected in the duplication of the same design. Because it liked the performance of its U.S.R.A. 0-8-0's so much, NP purchased 20 similar G-2's from Alco in 1920. All are in service, scattered over NP's 6682-mile system. No. 1181 has a boiler blow-off valve mounted between domes, a headlight generator ahead of stack, and a coal pusher.



Welcome to the new dining car on NP's Vista-Dome North Coast Limited.

# "Right this way, folks"

What sounds good? Select prime boneless sirloin? Grilled choice lamb-chops? Don't forget to save room for Northern Pacific specialities like the Great Big Baked Potato and fluffy individual lemon meringue pie!

You'll feel right at home in these attractive new diners on NP's famous Vista-Dome North Coast Limited. Soft seats, soft music, wonderful scenery and service. On the popular Mainstreeter, enjoy newly re-styled lightweight diners. No wonder passengers always look forward to "First Call" on NP trains! For a free copy of the colorful "Northwest Adventure" travel booklet, write to G. W. Rodine, 412 Northern Pacific Railway, St. Paul 1, Minnesota.

NORTHERN PACIFIC RAILWAY

CHICAGO • TWIN CITIES
SPOKANE • TACOMA
PORTLAND • SEATTLE

**Route of the**
**MAINSTREETER and Vista-Dome NORTH COAST LIMITED**

## Counter Service in New Diners

The new diner-lunch cars, now in service on the North Coast Limited, offer a choice between tempting snacks and sandwiches at the counter . . . and N. P.'s famous full-course meals at tables.

Photograph by J. Baylor Roberts

A BAKED POTATO, TWO POUNDS, 15 CENTS

The North Coast Limited makes a specialty of these giant tubers from the State of Washington.

---

1950

## "Famously Good" FOOD

Below are shown some typical table d'hote meals served in North Coast Limited Dining Cars. In addition, there is a wide variety of a la carte dishes, popularly priced.

### CLUB BREAKFASTS—$1.00 to $1.50

Example of $1.25 Breakfast
Yakima Valley Baked Apple with Cream
or
Fruit Juice or Cereal with Cream
Minced Ham with Scrambled Eggs
Chipped Beef in Cream on Toast
Eggs as you Prefer 'em
Raisin Toast Hot Muffins
Strawberry Preserves
Coffee Cocoa Milk Postum Tea

### LUNCHEON—$1.65

Cream of Tomato Soup
or
Chilled Grapefruit Juice
Broiled Chinook Salmon, Lemon Butter
Roast Leg of Veal, Sage Dressing
Frankfurters with Sauerkraut Grilled Loin Pork Chops
Whipped Potatoes String Beans
Fresh Vegetable Salad
(*N. P. Dressing*)
Parker House Rolls
Washington Cherry Pie Vanila Ice Cream Cup Custard
Coffee Tea Milk

### PLATE LUNCHEON—$1.35

Chef's Special
(*Meat, Poultry, Fish or Eggs*)
Potatoes Vegetable
Parker House Rolls
Fresh Pie Ice Cream
Coffee Tea Milk

### DINNER—$2.25

Fruit Cup Honolulu
Consomme or Chilled Apple Juice
Salted Oregon Filberts
Broiled Lake Superior Whitefish, Maitre d'Hotel
Roast Choice Ribs of Beef, au Jus
Fried Spring Chicken (*Maryland*) Broiled Lamb Chops (*Park Avenue*)
Big Baked Potato
Cauliflower, au Gratin
Calavo, Grapefruit and Orange Salad
(*Our Own Dressing*)
Hot Tea Biscuits
Yakima Apple Pie (*Cheddar Cheese*) Kadota Figs Maple Nut Sundae (*Butter Cookies*)
Coffee Tea Milk
Sirloin or Tenderloin Steak Dinner selected on above Menu, $3.50.

### PLATE DINNER—$1.35

Chef's Special
(*Meat, Poultry, Fish or Eggs*)
Potatoes Vegetable
Hot Biscuits
Coffee Tea Milk

### AT THE LUNCH COUNTER

Tasty snacks priced from 65c to 95c, are offered
— Also a variety of a la carte items —

### SPECIAL MENUS FOR CHILDREN

Club Breakfasts, 65c to 85c; Club Luncheons, 65c to 85c;
Club Dinners, 70c to 95c
Also a variety of special a la carte dishes

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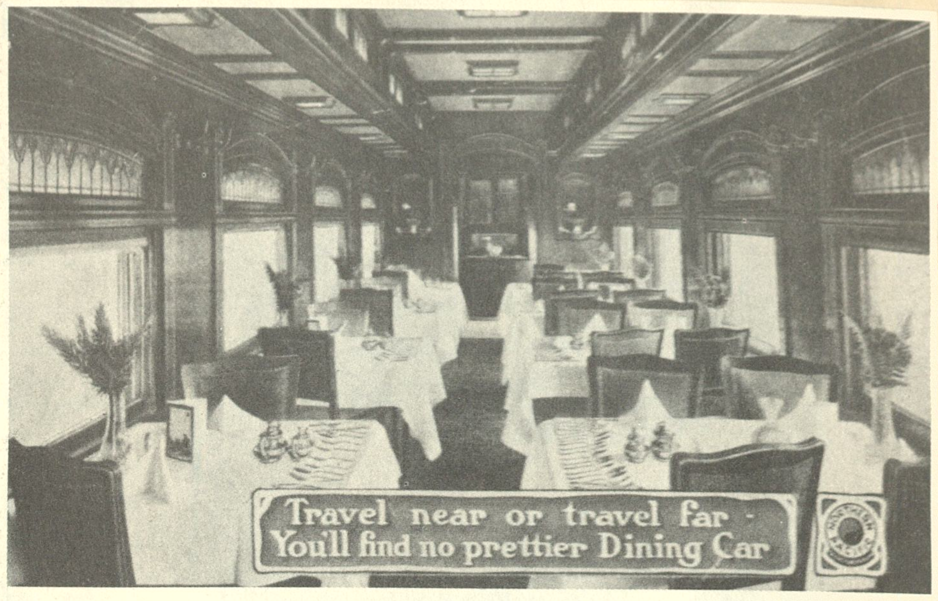
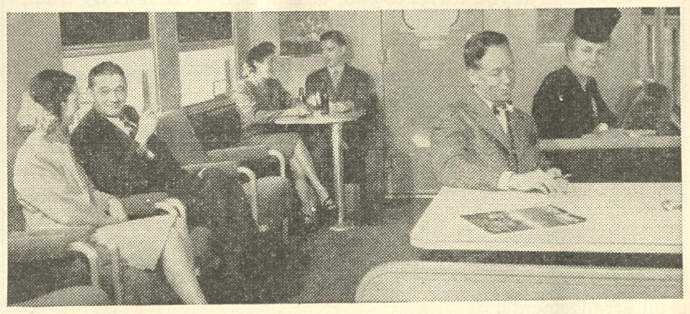
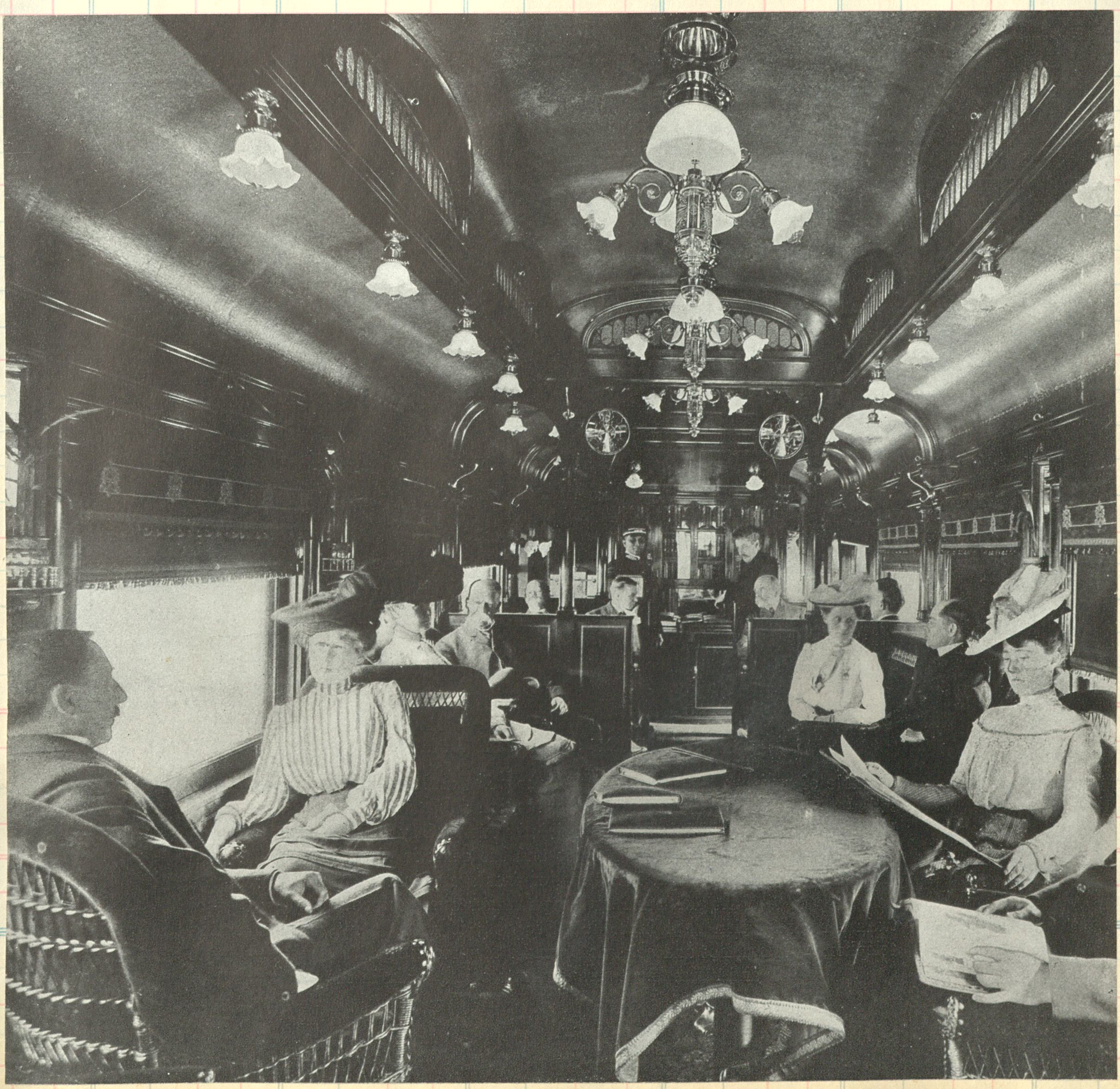


Postcard printed for Northern Pacific Railway shows interior of one of the line's dining cars of 1910 vintage.

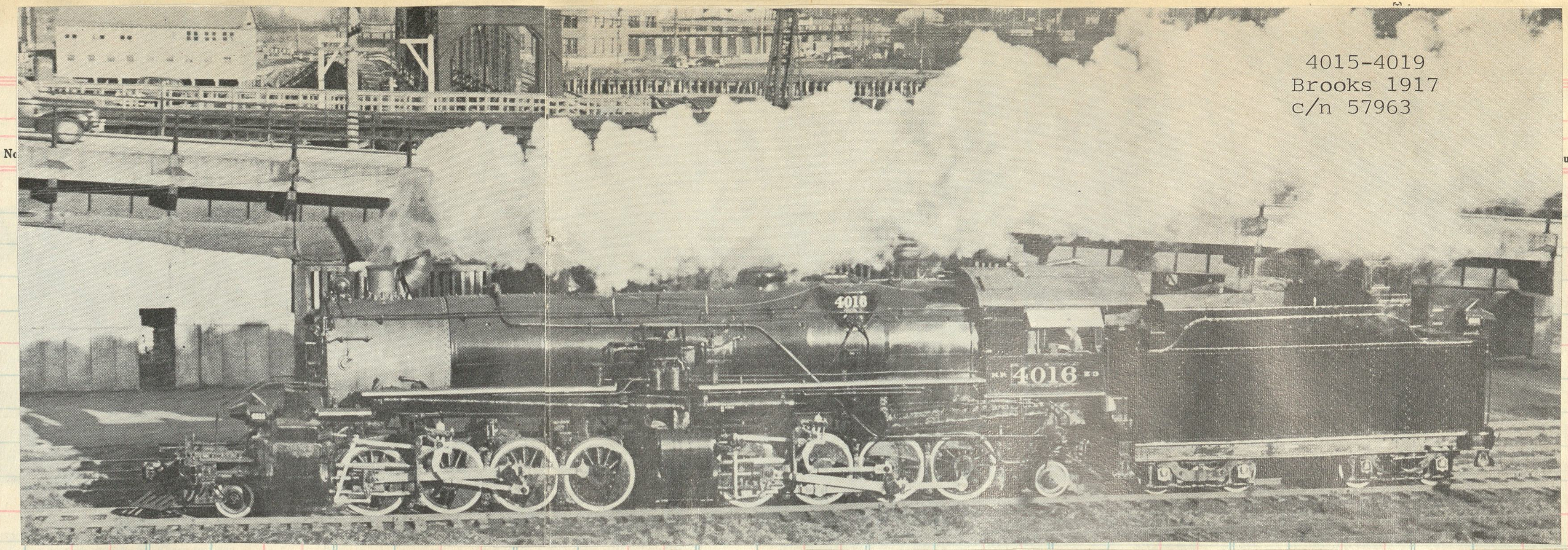


Buffet-Lounge Coaches, now in service on the North Coast Limited, offer light snacks and beverages and luxurious lounging space expressly for coach passengers.



109

Clos. No. | Sold | Amount | Clos. No. | Sold | Amount | Clos. No ... Amount | Clos. No. | Sold | Amount


4015-4019
Brooks 1917
c/n 57963

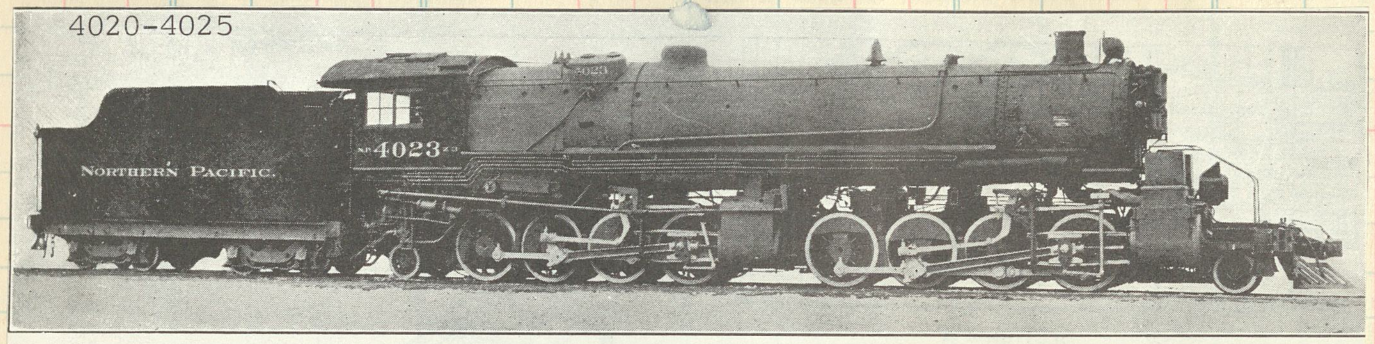
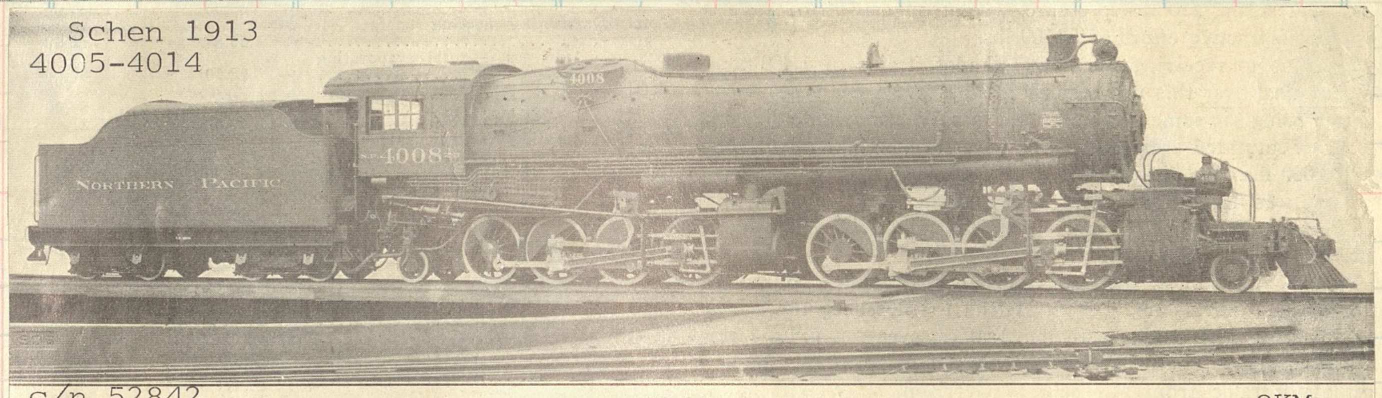

4020-4025

**Fig. 94**—Mallet Articulated (2-8-8-2) Compound Locomotive for Freight Service. Built for Northern Pacific by the American Locomotive Company.

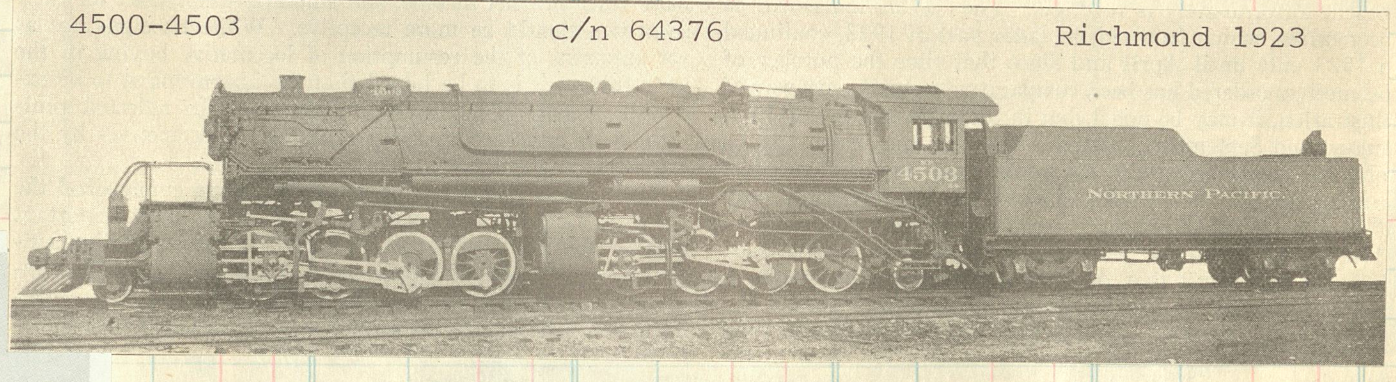
c/n 62470 Brooks 1920

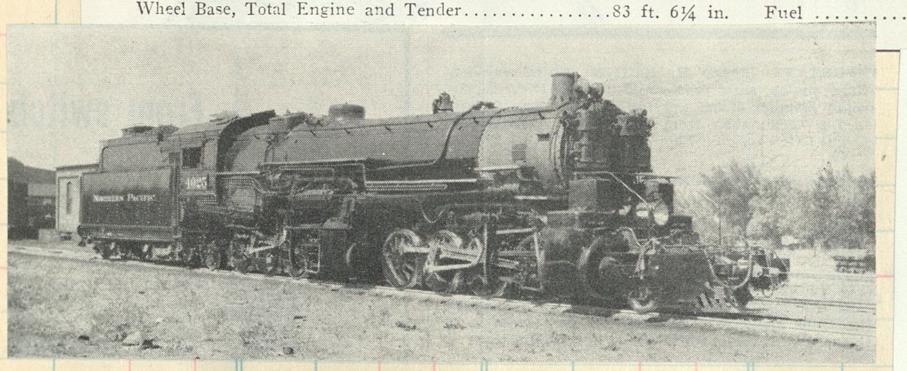
| | | | |
|---|---|---|---|
| Gage | 4 ft. 8½ in. | Heating Surface, Tubes | 3,575 sq. ft. |
| Cylinders | 26 in. and 40 in. by 30 in. | Heating Surface, Flues | 1,548 sq. ft. |
| Steam Pressure | 200 lbs. | Heating Surface, Superheater | 1,305 sq. ft. |
| Diameter of Drivers | 57 in. | Grate Area | 84.3 sq. ft. |
| Wheel Base, Driving | 15 ft. | Weight on Drivers | 419,500 lbs. |
| Wheel Base, Total | 55 ft. 2 in. | Total Weight Engine | 483,000 lbs. |
| Wheel Base, Total Engine and Tender | 83 ft. 6¼ in. | Fuel | Sub. Bituminous coal |

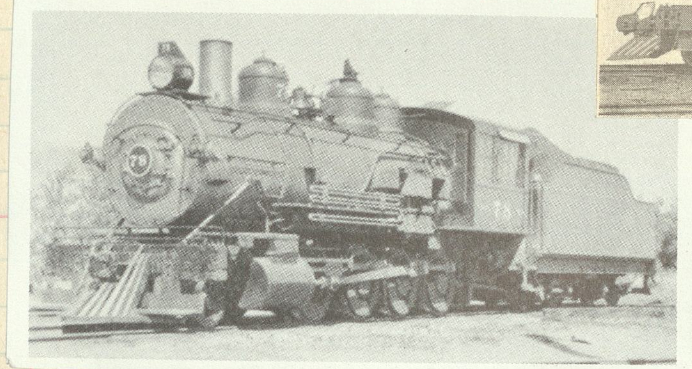

Schen 1913
4005-4014
c/n 52842

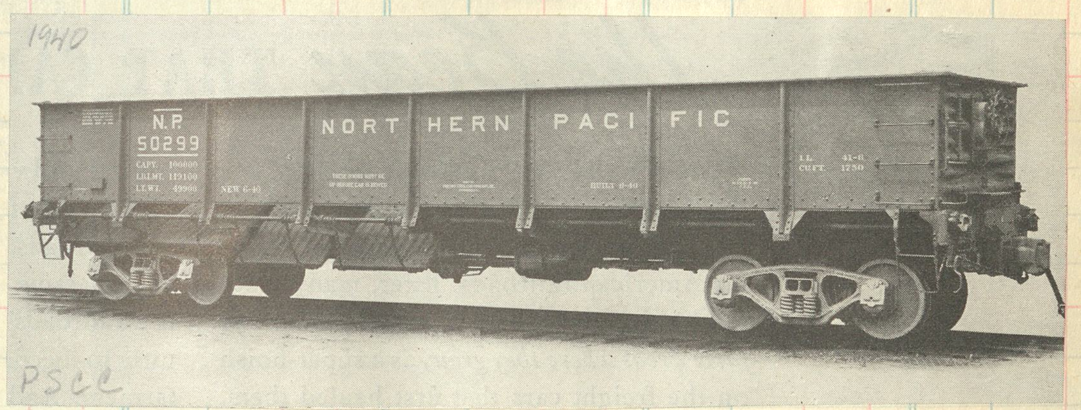
Powerful Articulated Pusher Locomotive; Northern Pacific.

OKM

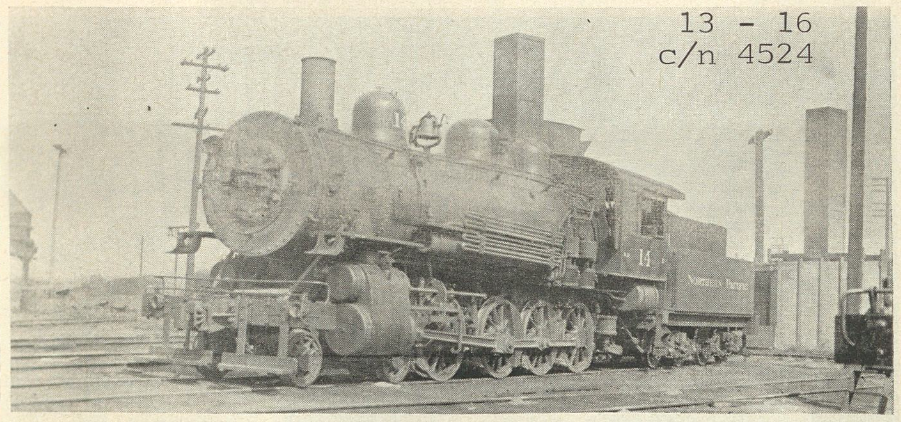

4500-4503 c/n 64376 Richmond 1923





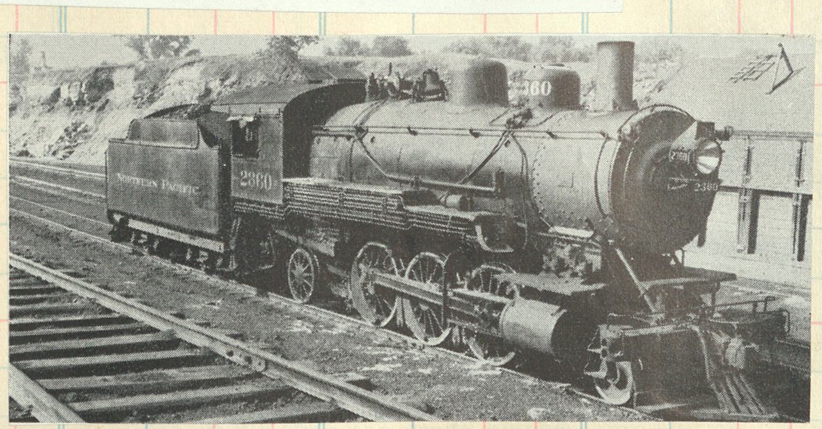

1940

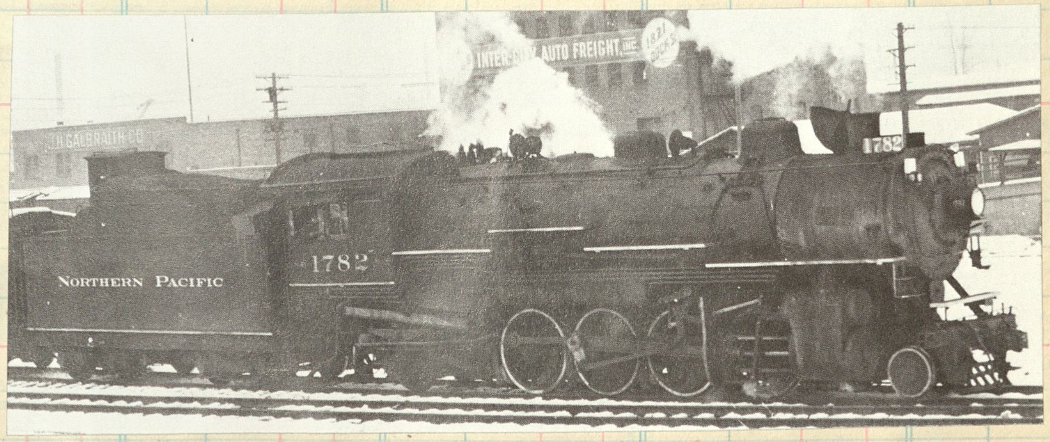
PSCC

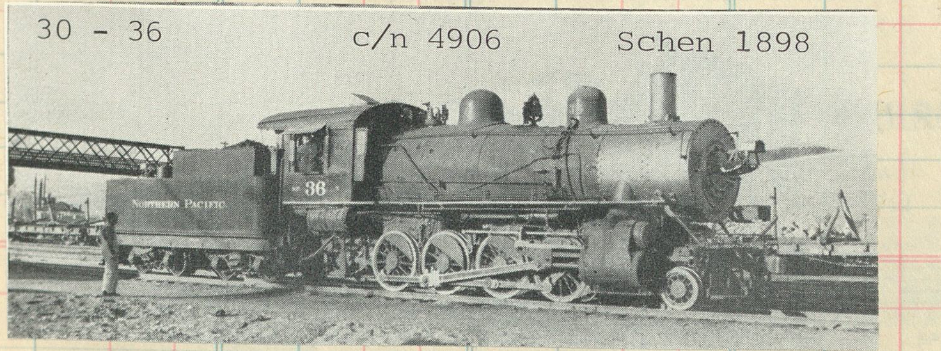

13 - 16
c/n 4524

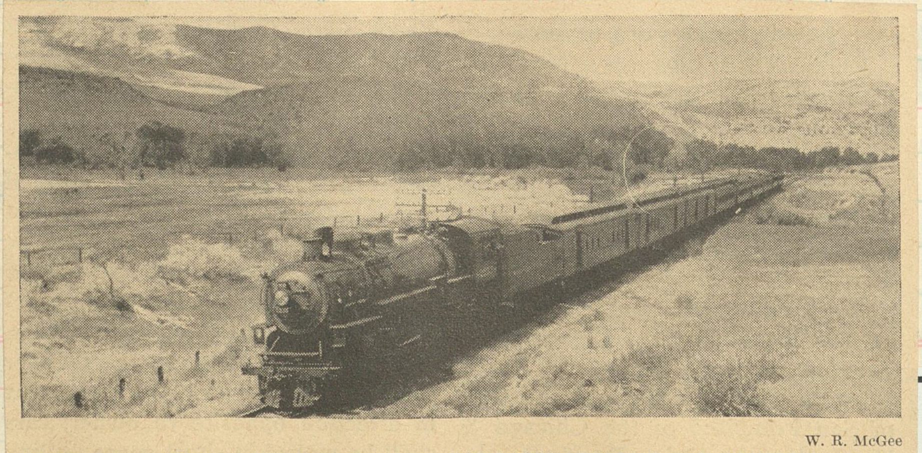
Don Wellings.

**OIL-BURNING Northern Pacific No. 14 was built in 1897 at Schenectady. She's CC&C's oldest power.**

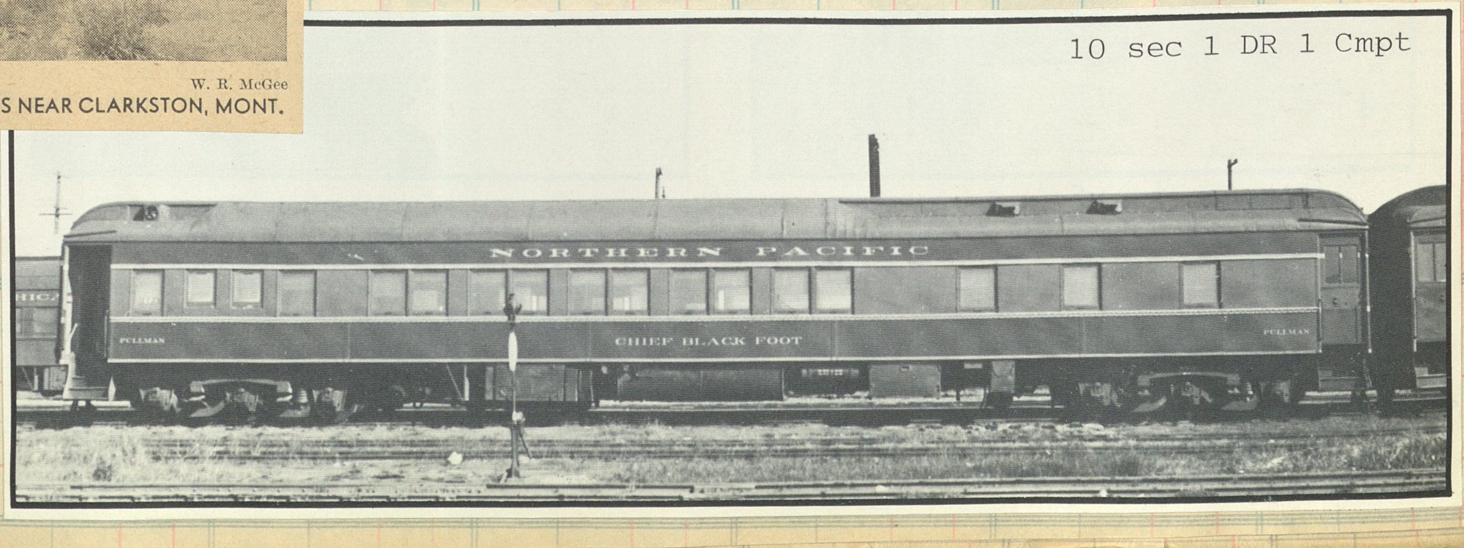


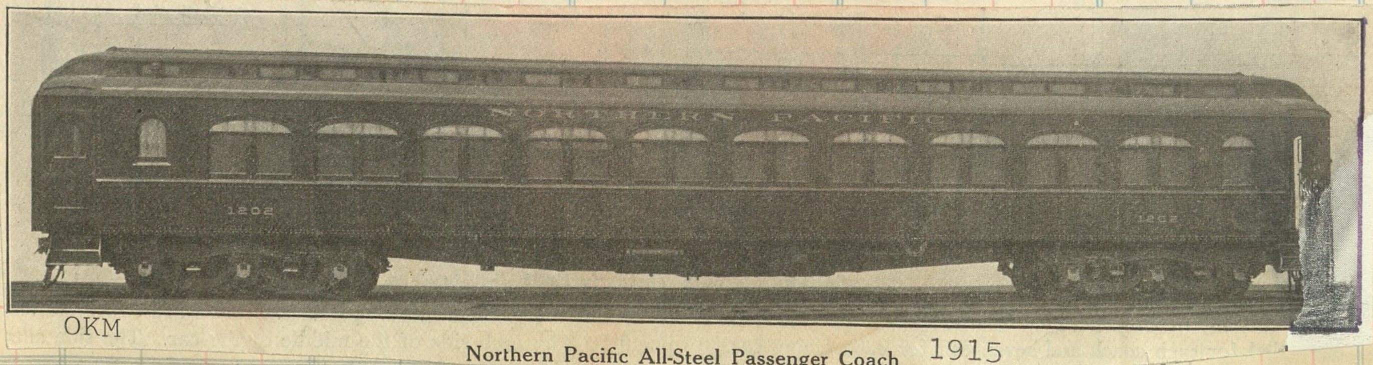



30 - 36 c/n 4906 Schen 1898


W. R. McGee

NORTHERN PACIFIC'S ENGINE 2232 HAULING PASSENGERS NEAR CLARKSTON, MONT.


10 sec 1 DR 1 Cmpt

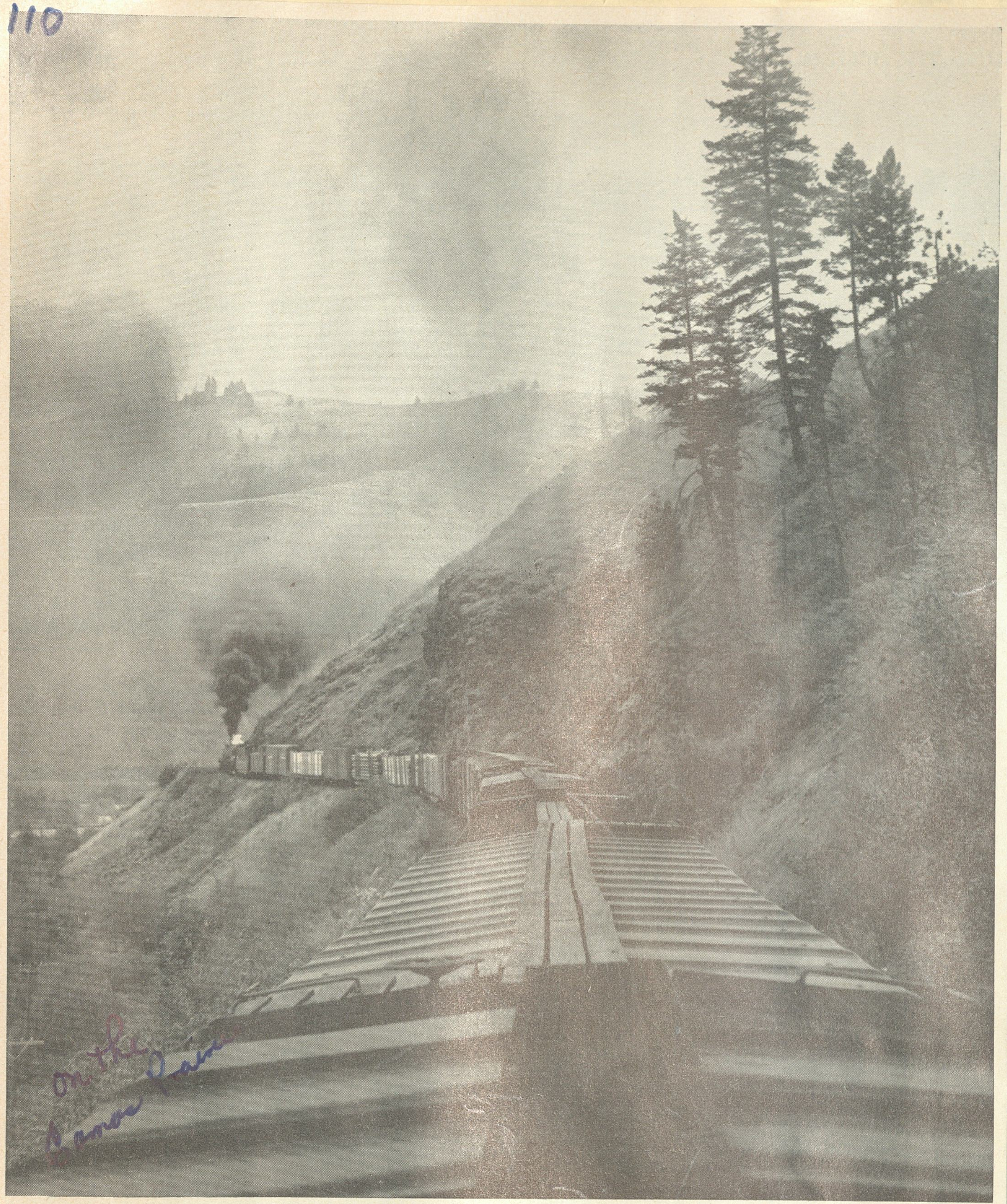

OKM

Northern Pacific All-Steel Passenger Coach 1915

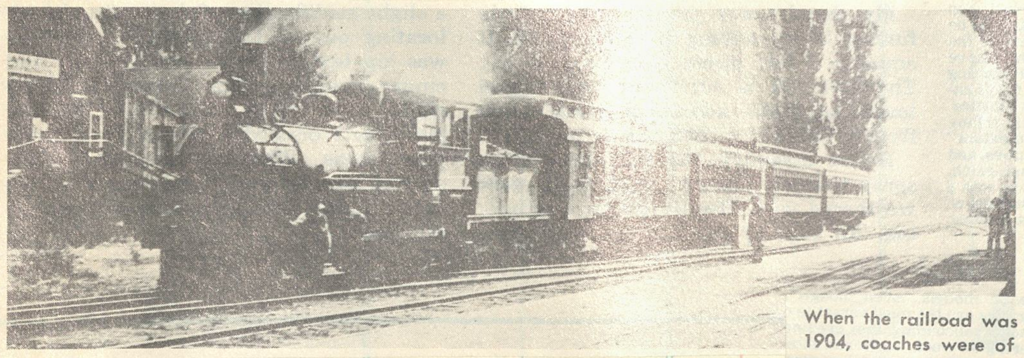
110

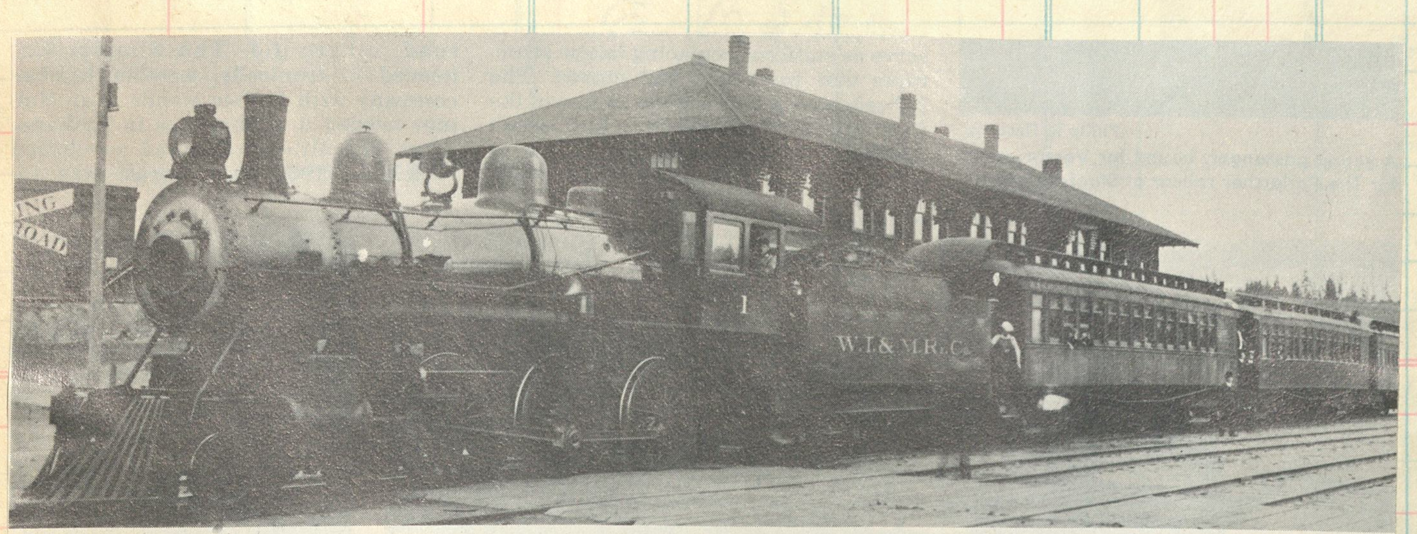
So

unt Clos. No. Sold Amount


On the Camas Prairie

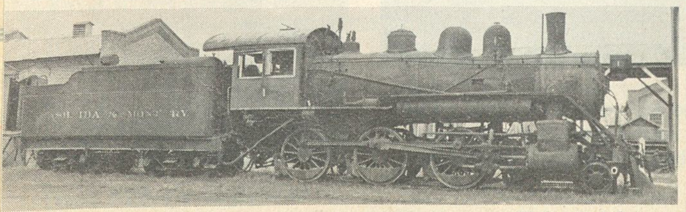
A Northern Pacific freight climbs the rugged slopes of Clearwater River Canyon in the Pacific Northwest. By Philip R. Hastings.


When the railroad was still fairly new, in 1904, coaches were of the open-platform type, but a grill car, used at that time at the rear of the train, had closed vestibules. This is train 311 with engine 652, a class B 4-4-0, standing in Lewiston at the end of its run.

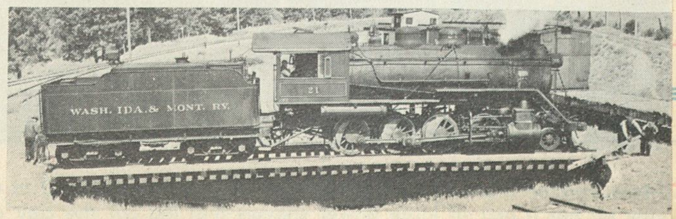


Potlatch Forests Inc

↗Ten-Wheeler no. 1 was in its prime when it was photographed at Potlatch in 1906 or 1907. ↓The same engine was found, stored out of service, on one of the Potlatch roundhouse leads in April 1961.

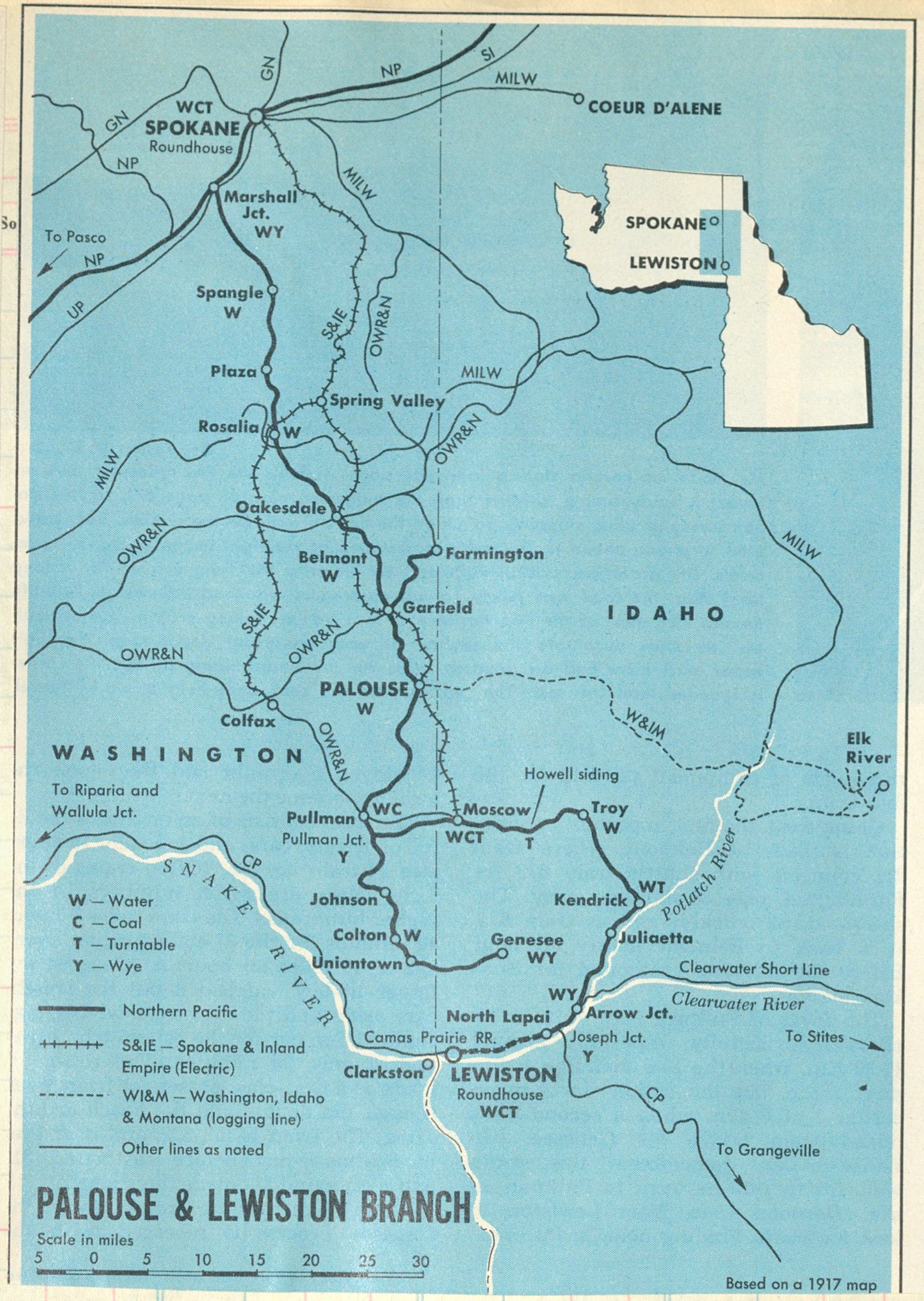


Philip C. Johnson.


WASH. IDA. & MONT. RY.

Philip C. Johnson.

The engineer had to balance no. 21 on the turntable so its weight was evenly distributed to allow the crew to turn it around by hand.


GN
NP
SI
MILW
COEUR D'ALENE
WCT
SPOKANE
Roundhouse
Marshall Jct.
WY
To Pasco
UP
Spangle
W
Plaza
S&IE
OWR&N
Spring Valley
Rosalia
W
Oakesdale
Belmont
W
Farmington
Garfield
IDAHO
SPOKANE
LEWISTON
PALOUSE
W
W&IM
Colfax
WASHINGTON
To Riparia and Wallula Jct.
Pullman
WC
Pullman Jct.
Y
Moscow
WCT
Howell siding
T
Troy
W
Elk River
SNAKE RIVER
CP
Johnson
Colton
W
Uniontown
Genesee
WY
Kendrick
WT
Juliaetta
Potlatch River
Clearwater Short Line
Clearwater River
WY
North Lapai
Arrow Jct.
Joseph Jct.
Y
Camas Prairie RR.
Clarkston
LEWISTON
Roundhouse
WCT
To Stites
To Grangeville
W — Water
C — Coal
T — Turntable
Y — Wye
Northern Pacific
S&IE — Spokane & Inland Empire (Electric)
WI&M — Washington, Idaho & Montana (logging line)
Other lines as noted
PALOUSE & LEWISTON BRANCH
Scale in miles
5 0 5 10 15 20 25 30
Based on a 1917 map

## TIMETABLES

**Table 52—PALOUSE AND LEWISTON BRANCH.**

| 873 | 313 | 311 | Mls | *July* 24, 1921. | 312 | 314 | 874 |
|---|---|---|---|---|---|---|---|
| ..... | P M | A M | .... | (*Pacific time.*) | P M | P M | ..... |
| ..... | *4 00 | *8 15 | 0 | lve. + **Spokane** ♁ arr. | 2 30 | 6 30 | ..... |
| ..... | 4 20 | 8 38 | 9 | ...... **Marshall** .... ♁ | 2 05 | 6 05 | ..... |
| ..... | 4 47 | 9 03 | 20 | +..... Spangle ..... ♁ | 1 39 | 5 40 | ..... |
| ..... | 5 05 | 9 21 | 28 | .........Plaza.......♁ | 1 20 | 5 21 | ..... |
| ..... | 5 20 | 9 38 | 36 | +......Rosalia......♁ | 1 03 | 5 05 | ..... |
| ..... | – – | 9 49 | 41 | ........McCoy....... | 12 50 | – – | ..... |
| A M | 5 45 | 10 01 | 47 | +.... Oakesdale ....♁ | 12 37 | 4 40 | A M |
| d10 15 | 5 58 | 10 14 | 52 | arr..+**Belmont** ♁ .lve. | 12 25 | 4 28 | 11 35 |
| 10 50 | ..... | ..... | 59 | ar...**Farmington** ♁ lv. | ..... | ..... | d11 00 |
| A M | – – | 10 23 | 56 | .........Eden......... | 12 15 | – – | A M |
|  | 6 13 | 10 28 | 58 | +..... Garfield .....♁ | 12 10 | 4 14 |  |
| ..... | 6 37 | 10 50 | 68 | +..... Palouse .....♁ | 11 44 | 3 52 | ..... |
| ..... | 6 50 | 11 05 | 74 | ........ Fallon ........ | 11 28 | 3 35 | ..... |
| ..... | 7 01 | 11 16 | 79 | ....... Whelan ....... | – – | 3 26 | ..... |
| ..... | ‖7 30 | ‖11 45 | 85 | +.... **Pullman** ....♁ | ‖11 05 | ‖3 15 | ..... |
| ..... | 7 41 | 11 58 | 90 | .......Sunshine....... | 10 35 | 2 53 | ..... |
| ..... | 7 55 | 12 10 | 95 | +.... **Moscow** ....♁ | 10 20 | 2 40 | ..... |
| ..... | 8 10 | 12 25 | 101 | ......... Joel ......... | 10 05 | 2 25 | ..... |
| ..... | 8 22 | 12 35 | 106 | ........Howell........ | 9 55 | – – | ..... |
| ..... | 8 32 | 12 45 | 108 | +.......Troy.......♁ | 9 45 | 2 05 | ..... |
| 323 | 9 05 | 1 23 | 120 | +.... Kendrick ....♁ | 9 02 | 1 23 | 324 |
| A M | 9 15 | 1 33 | 124 | +.....Juliaetta.....♁ | 8 52 | 1 10 | P M |
| *8 35 | 9 32 | 1 55 | 133 | ........**Arrow**........ | 8 32 | 12 48 | 1 50 |
| 8 45 | 9 40 | 2 05 | 135 | .......**Joseph**....... | 8 22 | 12 40 | 1 40 |
| 8 53 | 9 45 | 2 10 | 137 | +.. North Lapwai ..♁ | 8 20 | 12 35 | 1 35 |
| 9 15 | 10 10 | 2 30 | 147 | +....**Lewiston**....♁ | *8 00 | *12 15 | *1 15 |
| A M | P M | P M | .... | ARRIVE] [LEAVE | A M | P M | P M |

C.P.

**Table 41—CLEARWATER SHORT LINE.**

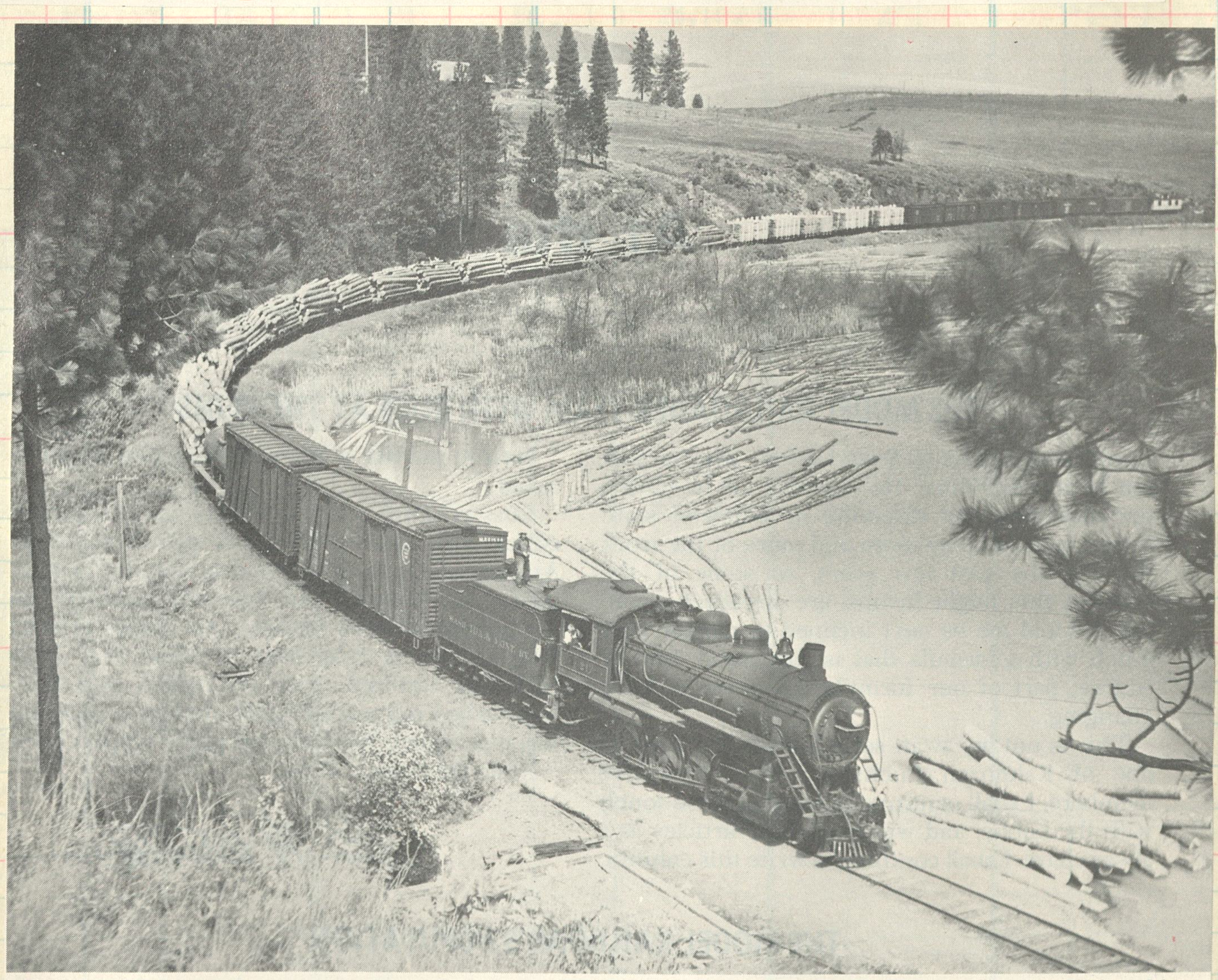
| 875 | 325 | Ms | *July* 24, 1921. | 328 | 876 |
|---|---|---|---|---|---|
| ..... | A M | ... | (*Pacific time.*) | P M | ..... |
| ..... | *8 15 | ... | lve.. **Spokane** ..arr. | 2 30 | ..... |
| ..... | P M | ... | ..................... | A M | ..... |
| A M | *1 15 | ... | lve..**Lewiston**..arr. | 9 15 | A M |
| d9 05 | *1 55 | 0 | lve....**Arrow**....arr. | 8 25 | 11 59 |
| 9 20 | 2 05 | 3 | .......Myrtle....... | 8 15 | 11 30 |
| 9 45 | 2 30 | 12 | ...... Agatha....... | 7 56 | 10 55 |
| 9 55 | 2 38 | 13 | .......Lenore.....♁ | 7 51 | 10 40 |
| 10 25 | 2 54 | 20 | +......Peck......♁ | 7 34 | 10 10 |
| 10 45 | 3 05 | 25 | +.....Ahsahka....♁ | 7 22 | 9 50 |
| 11 00 | 3 18 | 29 | +....Oro Fino....♁ | 7 10 | 9 30 |
| 11 35 | 3 48 | 37 | +..... Greer .....♁ | 6 40 | 9 00 |
| 12 05 | 4 18 | 46 | ..... Tramway ..... | 6 10 | 8 30 |
| 12 30 | 4 38 | 52 | +.... Kamiah ....♁ | 5 50 | 8 15 |
| 1 10 | 5 00 | 60 | +.... Kooskia ....♁ | 5 28 | 7 45 |
| 1 30 | 5 10 | 63 | +.....**Stites**.....♁ | *5 20 | g7 30 |
| P M | P M | ... | ARRIVE] [LEAVE | A M | A M |

**Table 45—GENESEE BRANCH.**

| 321 | 665 | Ms | *July* 24, 1921. | 322 | 666 | 332 |
|---|---|---|---|---|---|---|
| A M | ..... | ... | (*Pacific time.*) | P M | ..... | P M |
| *8 15 | A M | ... | lve..+**Spokane** ♁ ..arr. | 2 30 | P M | 6 30 |
| 12 01 | †6 00 | ... | lve..+**Pullman** ♁ ..arr. | 10 35 | 5 00 | 2 45 |
| *12 07 | †6 10 | 0 | lve. **Pullman Junc** arr. | 10 25 | 4 35 | 2 38 |
| 12 20 | 6 30 | 5 | ........ Staley ........ | 10 10 | 4 15 | 2 27 |
| 12 27 | 6 45 | 7 | ....... Chamber ....... | 10 02 | 4 00 | 2 21 |
| 12 35 | 7 00 | 10 | ....... Johnson .....♁ | 9 55 | 3 45 | 2 15 |
| 12 50 | 7 23 | 15 | +...... Colton ......♁ | 9 40 | 3 10 | 2 02 |
| 1 00 | 7 45 | 18 | +.... Uniontown ....♁ | 9 33 | 2 50 | 1 56 |
| 1 07 | 8 10 | 20 | ......... Leon ......... | 9 25 | 2 30 | 1 50 |
| 1 25 | 8 40 | 27 | +.....**Genesee**.....♁ | †9 10 | †2 00 | §1 35 |
| P M | A M | ... | ARRIVE] [LEAVE | A M | P M | P M |

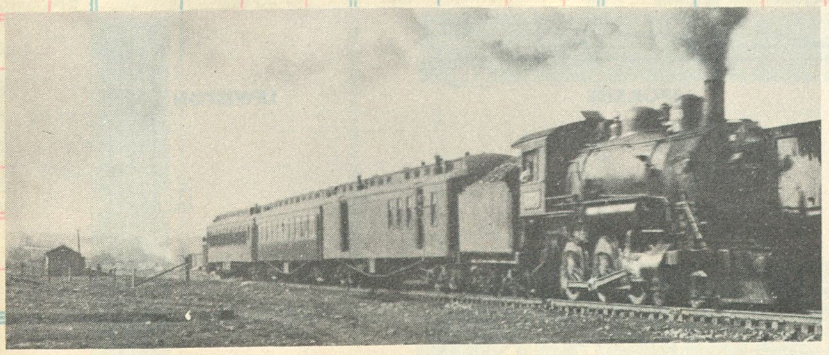
From the January 1922 *Official Guide.*

# Washington, Idaho & Montana Ry.

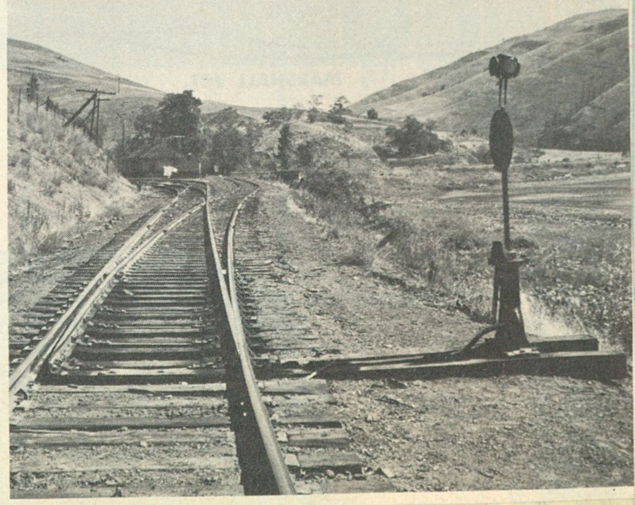


Philip C. Johnson.

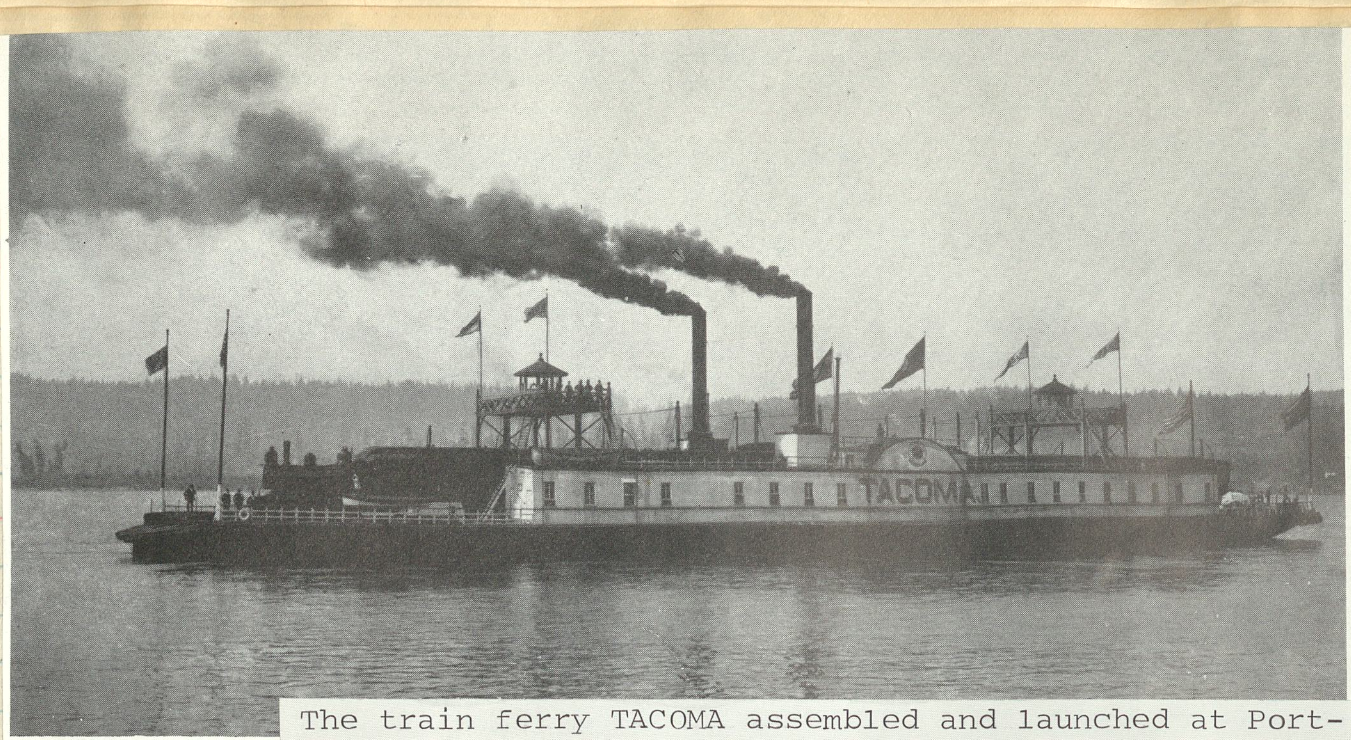
A westbound freight train, behind engine 21, is approaching Potlatch with logs for the sawmill and cut lumber bound for the interchanges



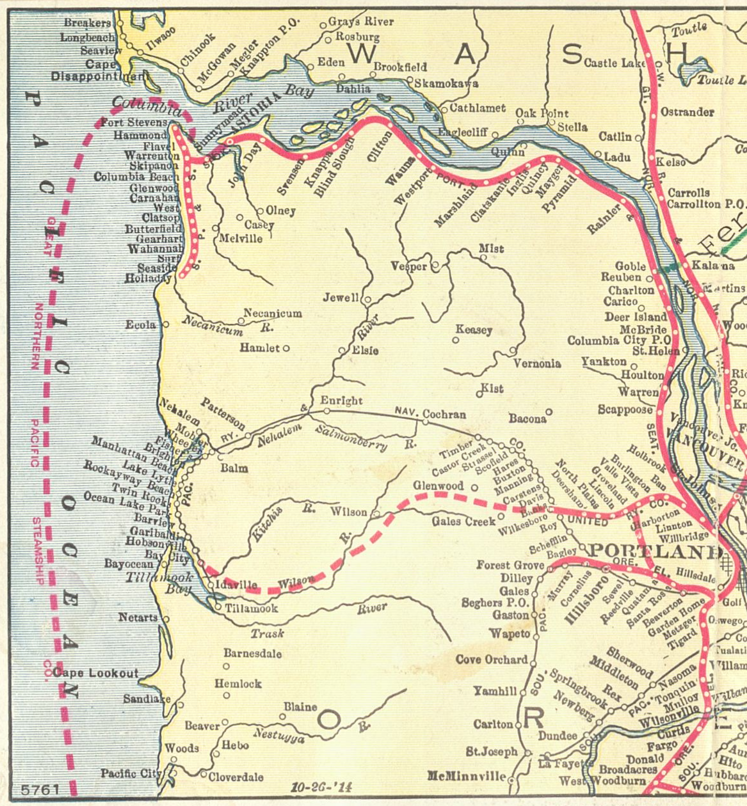
H. V. Banks collection.



In 1923, the period of this story, train 314 left Lewiston with a baggage combine and two coaches, one of them perhaps a rebuild of an older smoking car and the other of the former grill car. Open end platforms are gone. The locomotive is class P 4-6-0 no. 276 with inside valve gear. → Both tracks curve through the switch at Arrow Junction, where the Stites line disappears to the right; the P&L main line bears to the left. This is a modern photo.



The train ferry TACOMA assembled and launched at Portland in May 1883 served to open train service between Tacoma and Portland. Until track was completed down down the east bank of the Columbia and the bridge built between Vancouver and Willbridge in 1908, the TACOMA transferred trains across the river between Goble, Ore and Kalama, Wash. Was sold the the StPaul Road.


WASHINGTON
OREGON
PACIFIC OCEAN
Columbia River
Ferry site
PORTLAND
VANCOUVER
Kalama
Goble
Mt. St. Helens 10,000
Mt. Adams 12,470
Mt. Hood 11,225
NORTHERN PACIFIC STEAMSHIP CO.
5761
10-26-14
COPYRIGHT, 1914, BY POOLE BROS. CHICAGO.

PORTLAND, ORE. AND VICINITY (1914)

**Tickets reading Northern Pacific, Great Northern or Union Pacific Railways to any point on the joint line Seattle to Portland, inclusive, or on branch lines diverging therefrom, will be honored on any trains on the joint line.**

Great Northern, Union Pacific, and Northern Pacific operate all trains running between Portland, Ore., and Seattle, Wash., as pool trains. In this photo the noon train out of Seattle is handled by the NP.

**No. 408—Seattle-Tacoma-Portland**—Daily—(Seattle King Street Station).
*
**Standard Sleeping Car:—Seattle to San Francisco.** (from Portland on S. P. No. 11). Sections, Double Bedrooms, Drawing Rooms and Comp'ts. (4 cars.) (N-110, 111, 112, 113)
**Parlor Car** (N. P.) (air-conditioned)—**Seattle to Portland.** (*Railway owned*) (75)
**Tavern Car** (air-conditioned)—**Seattle to Portland.**
**Coaches** (air-conditioned)—**Seattle to Portland.**

Trn #408, a Portland "pool" train, with a consist of eleven cars departs Tacoma.

UNION STATION
2602

The Enumclaw local at Reservation

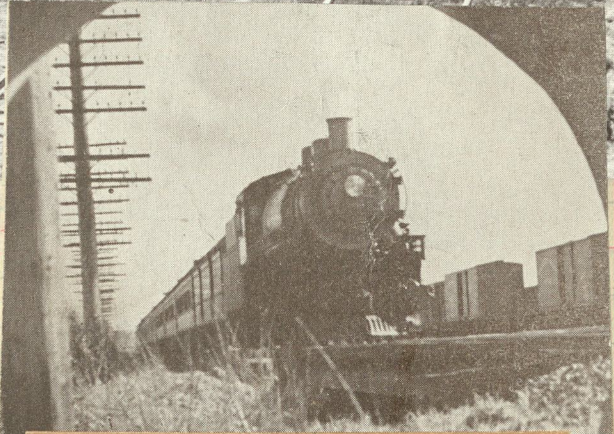
1365
NORTHERN PACIFIC

*Faster Service*— BETWEEN SEATTLE AND PORTLAND

ONLY
$2.50 ONE WAY
$4.00 ROUND TRIP

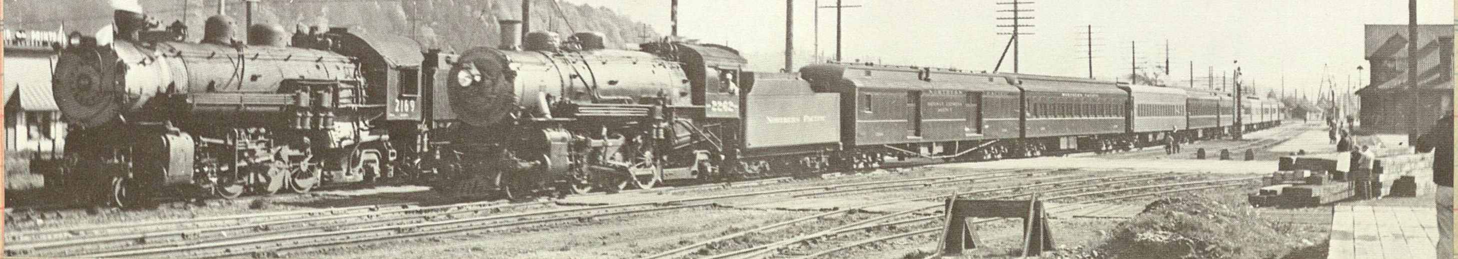
Northern Pacific has again speeded up service between Seattle and Portland. Train 407 leaves Portland 1:30 pm, arrives Seattle 5:30 pm; train 408 leaves Seattle 1:00 pm, arrives Portland 5:00 pm.

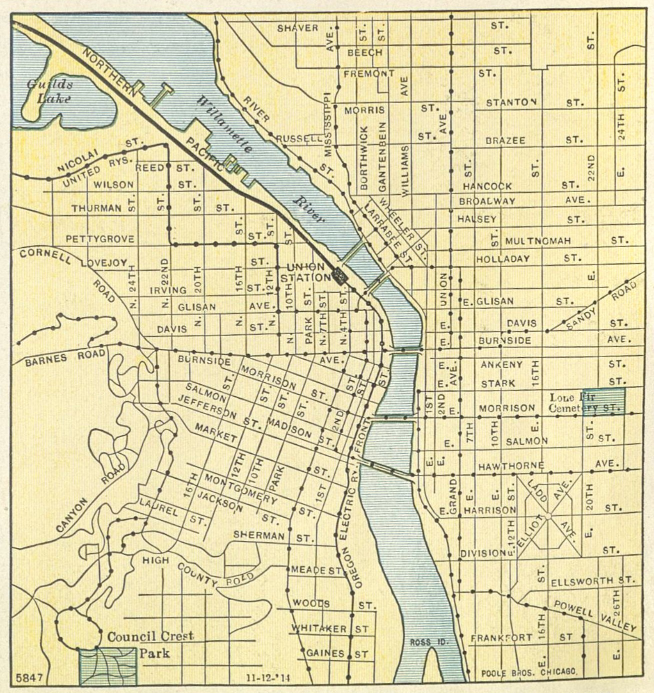
GO IN COMFORT AND SAFETY—BY TRAIN



An Enpee "pool" heading out of Portland for Seattle

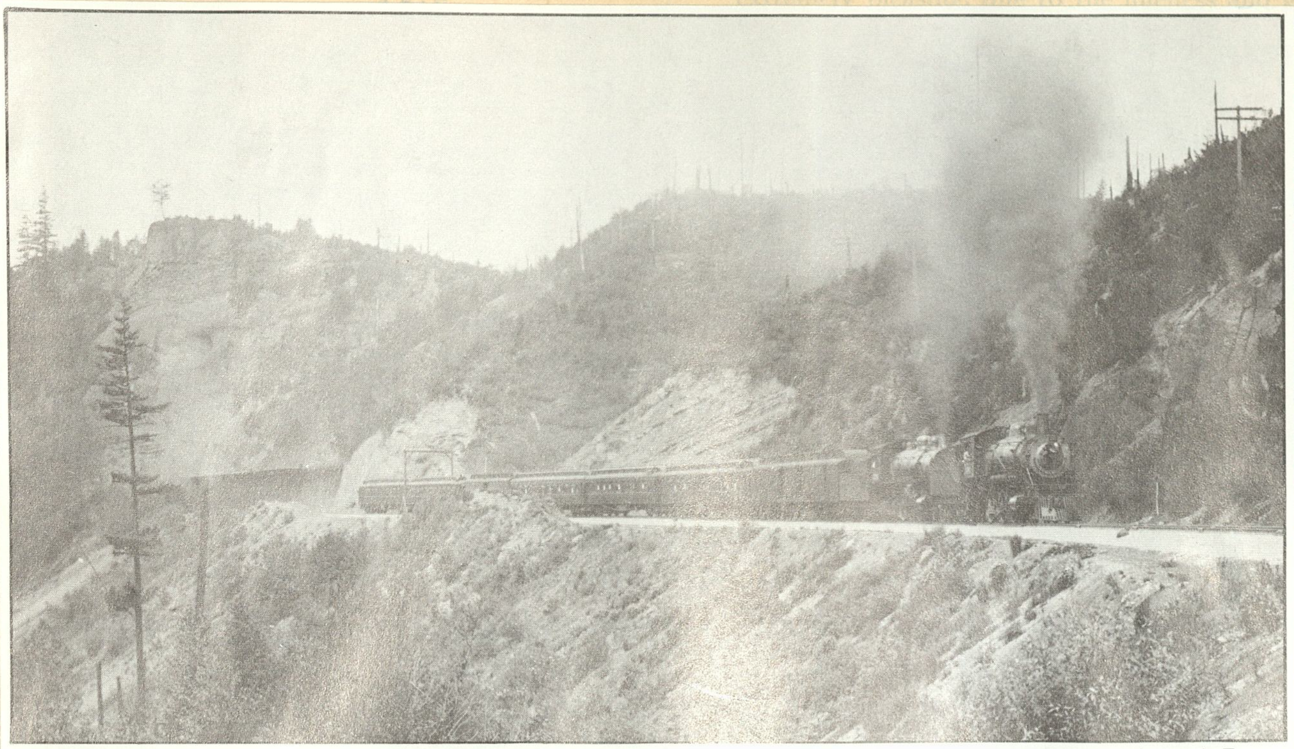
CENTRALIA, WASH. on the busy Portland-Seattle trackage [U.P.,G.N.,N.P.] Trains are northbound

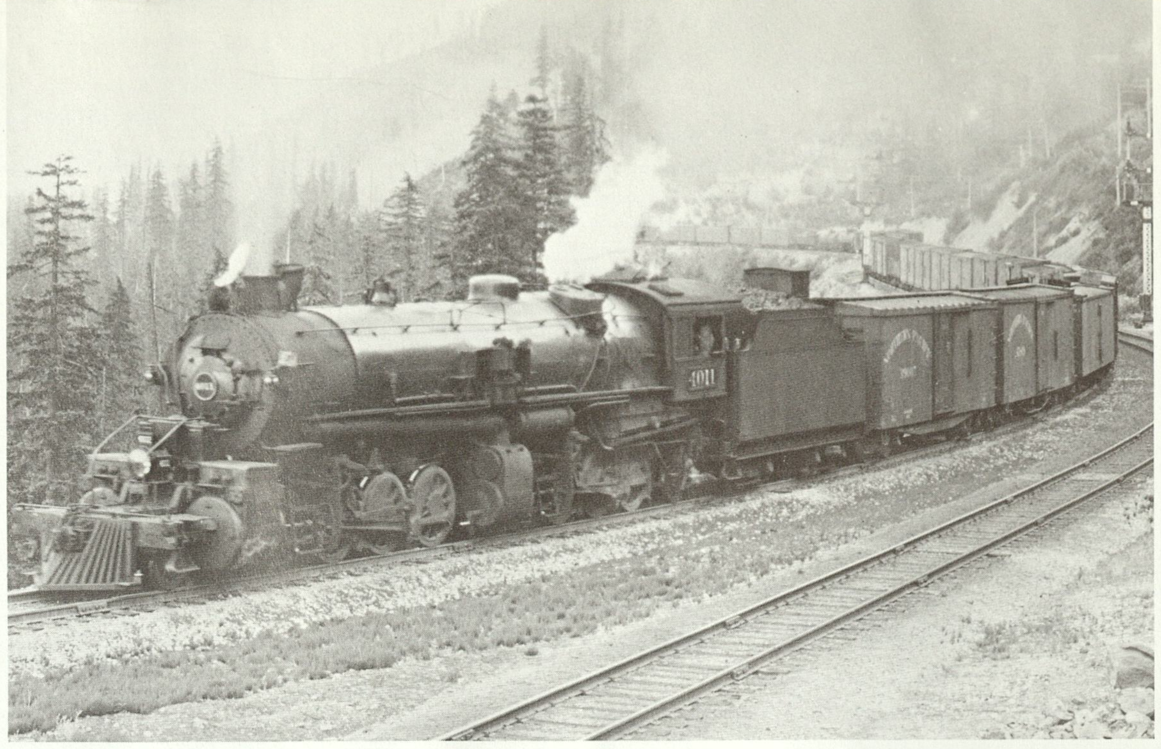


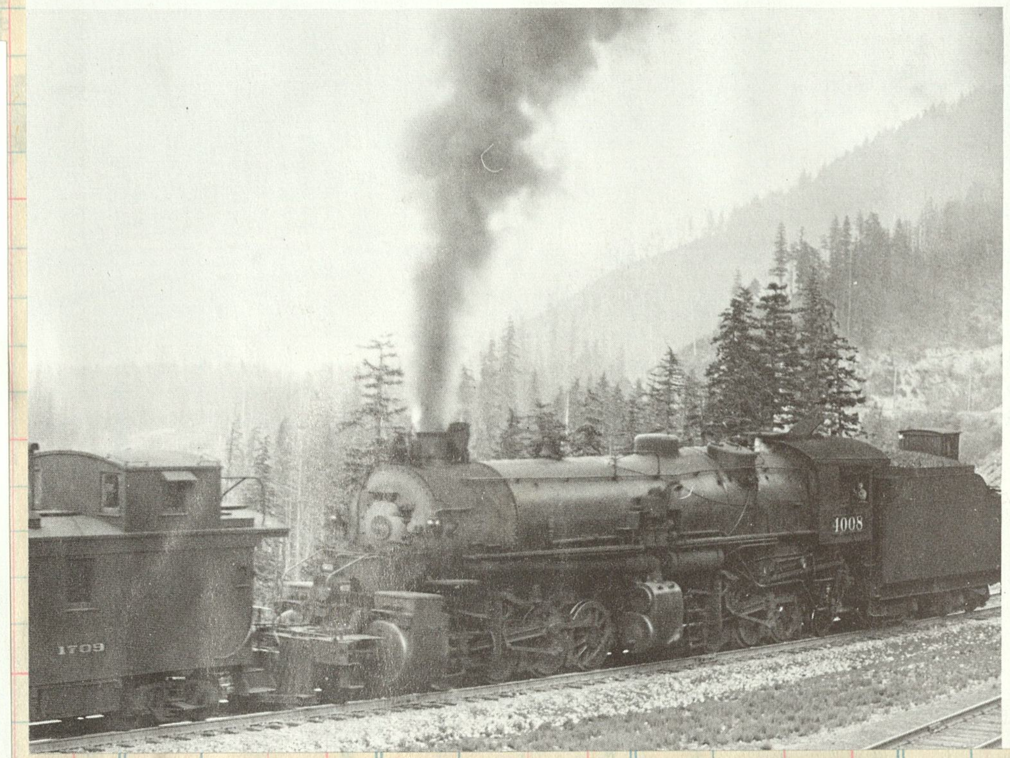

Willamette River
Guilds Lake
UNION STATION
Council Crest Park
5847
11-12-11
POOLE BROS. CHICAGO

NORTHERN PACIFIC RY. PORTLAND ELECTRIC LINES

112


NP passenger train near the west portal of tunnel #4, 1920's. James A. Turner

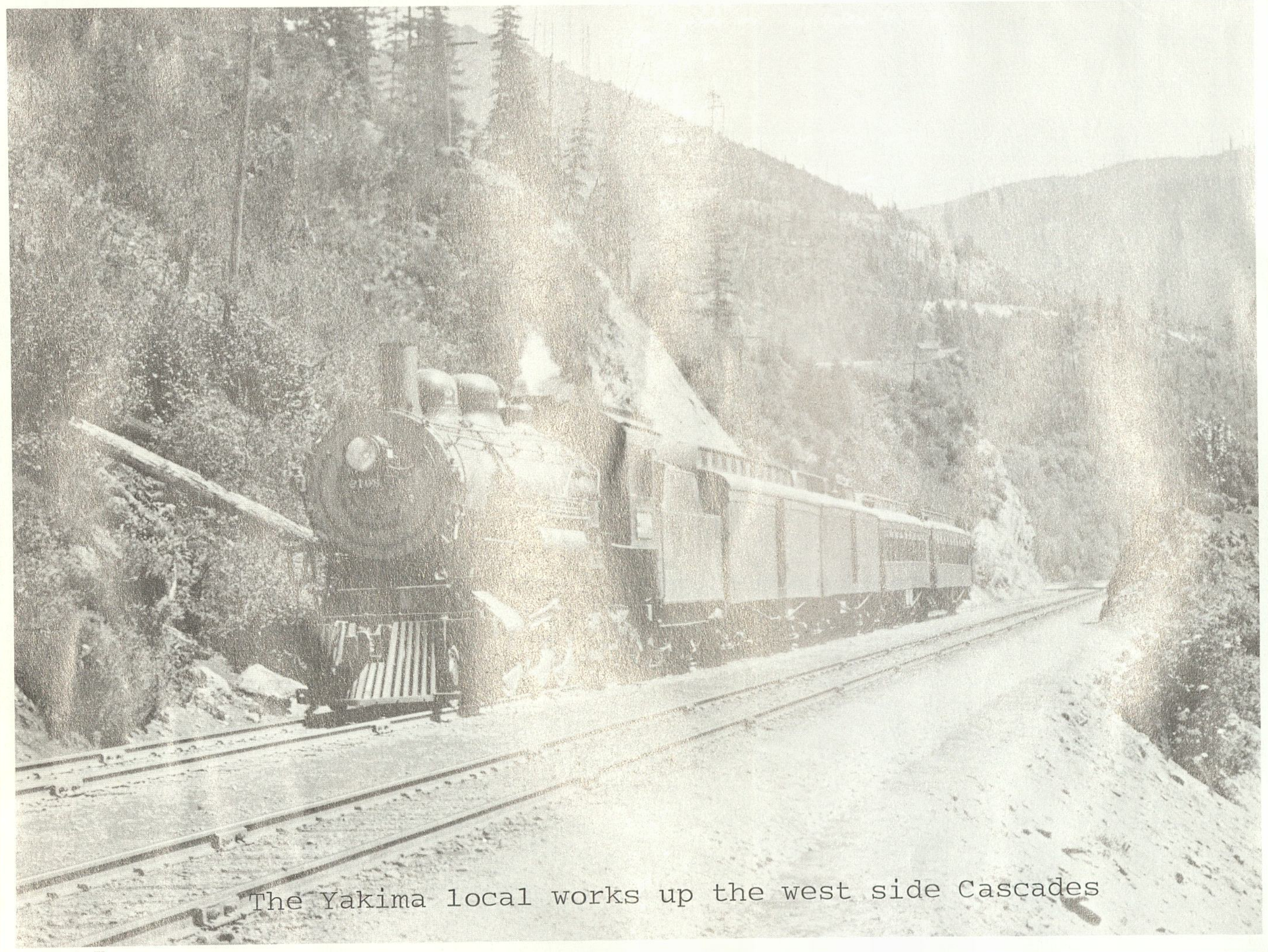




In the 1920's, as train length and tonnage increased, new and heavier locomotives were needed; especially in the rugged mountain passes of western Washington. The NP's answer was the Z-3 class 2-8-8-2 Mallet. Here, two of the mammoth engines help boost a long freight over Stampede Pass around 1924.

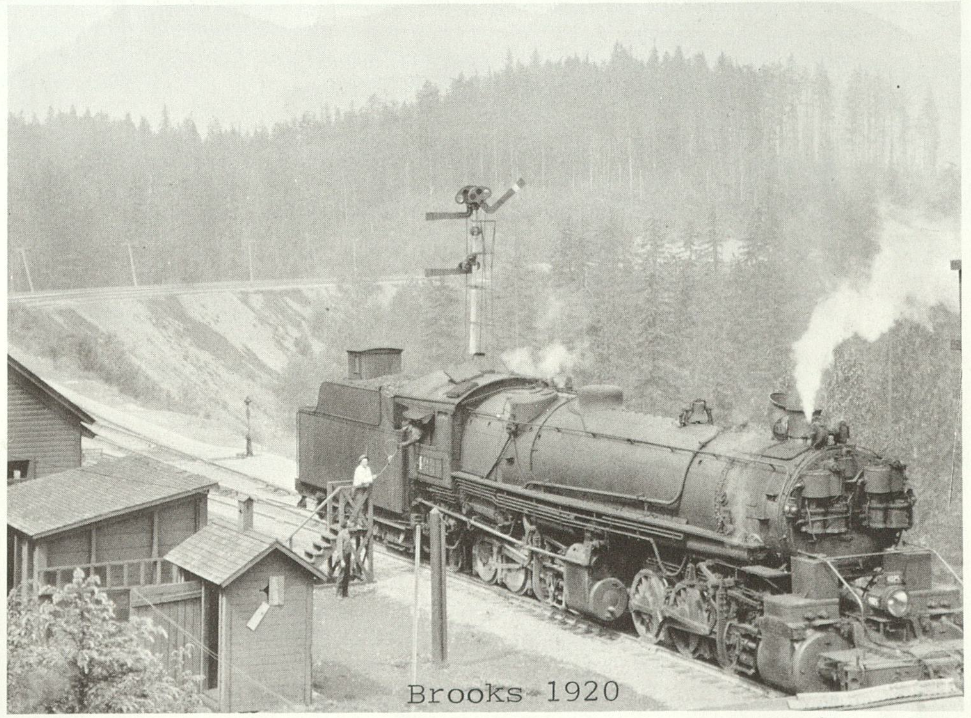
James A. Turner

4008 & 4011
Schen 1913

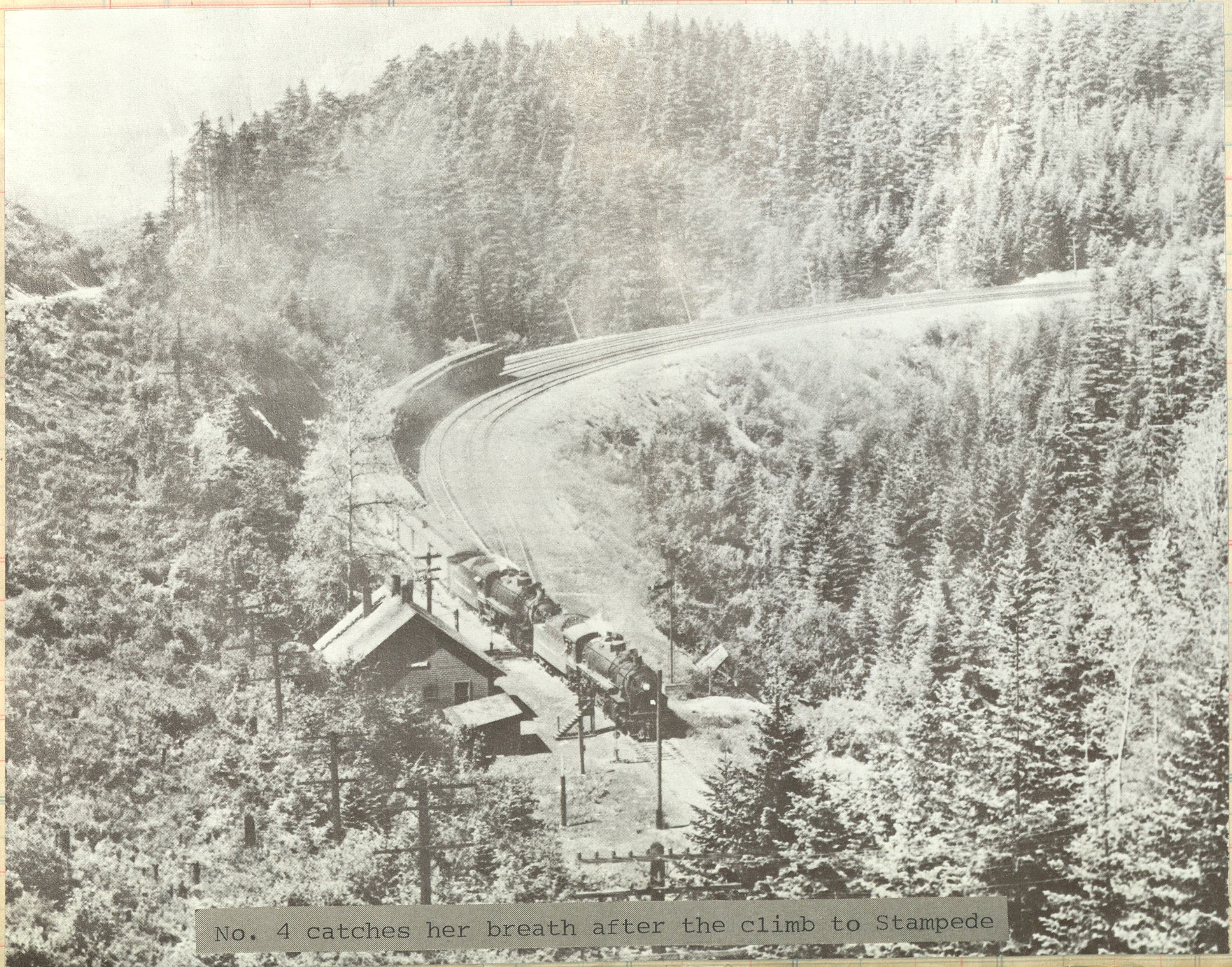

The Yakima local works up the west side Cascades

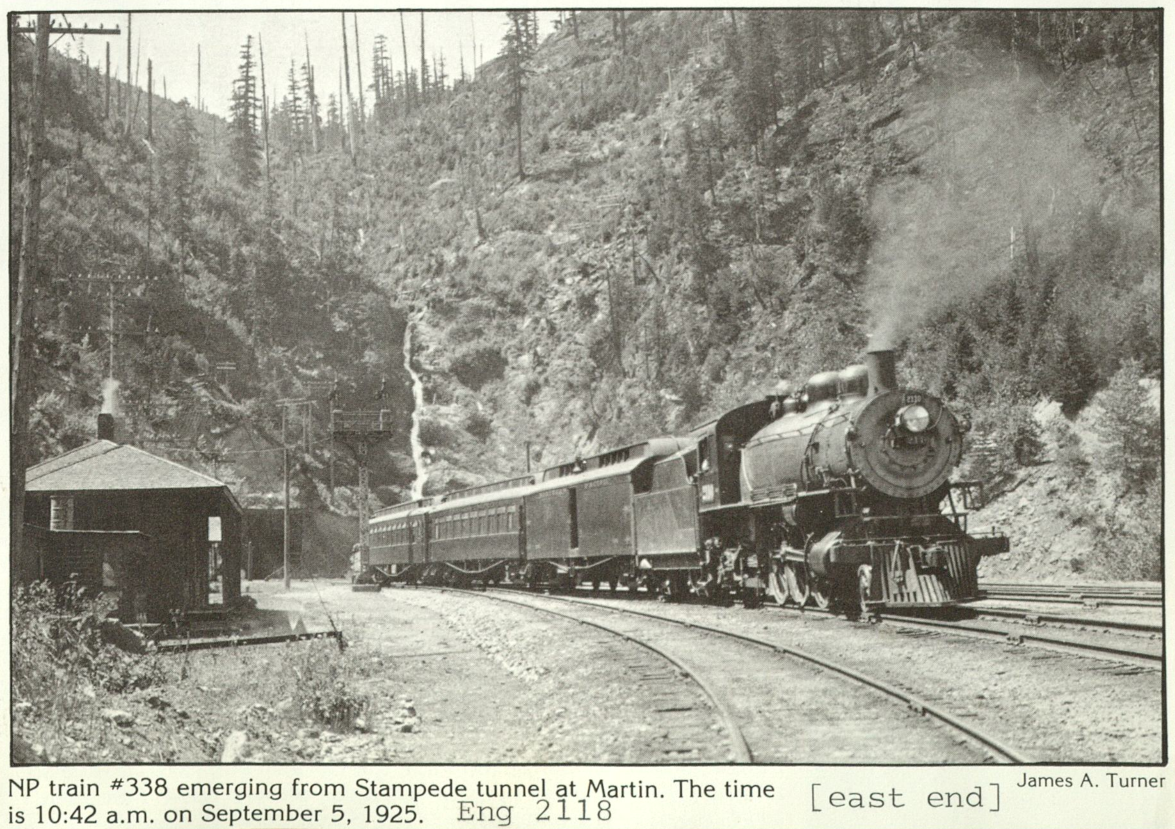
James A. Turner

NP #4025 picking up orders at Stampede Station in the mid-20's.


Brooks 1920

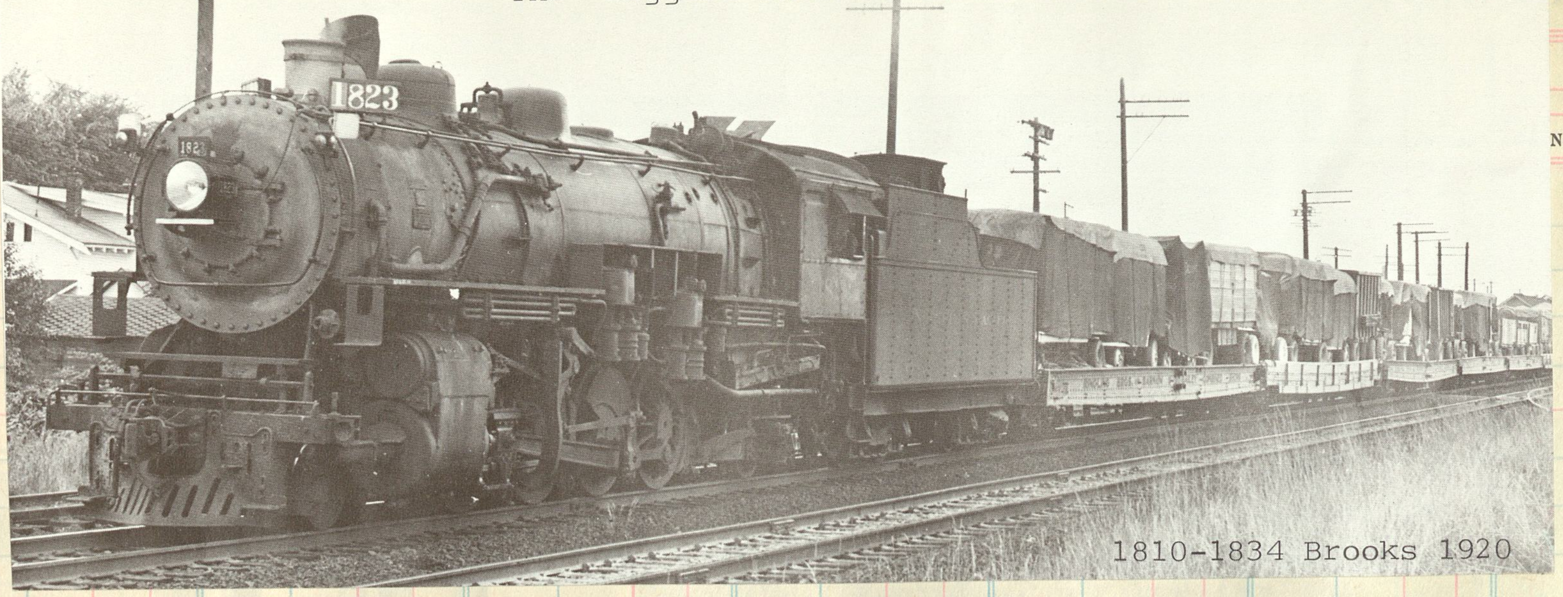
James A. Turner


No. 4 catches her breath after the climb to Stampede

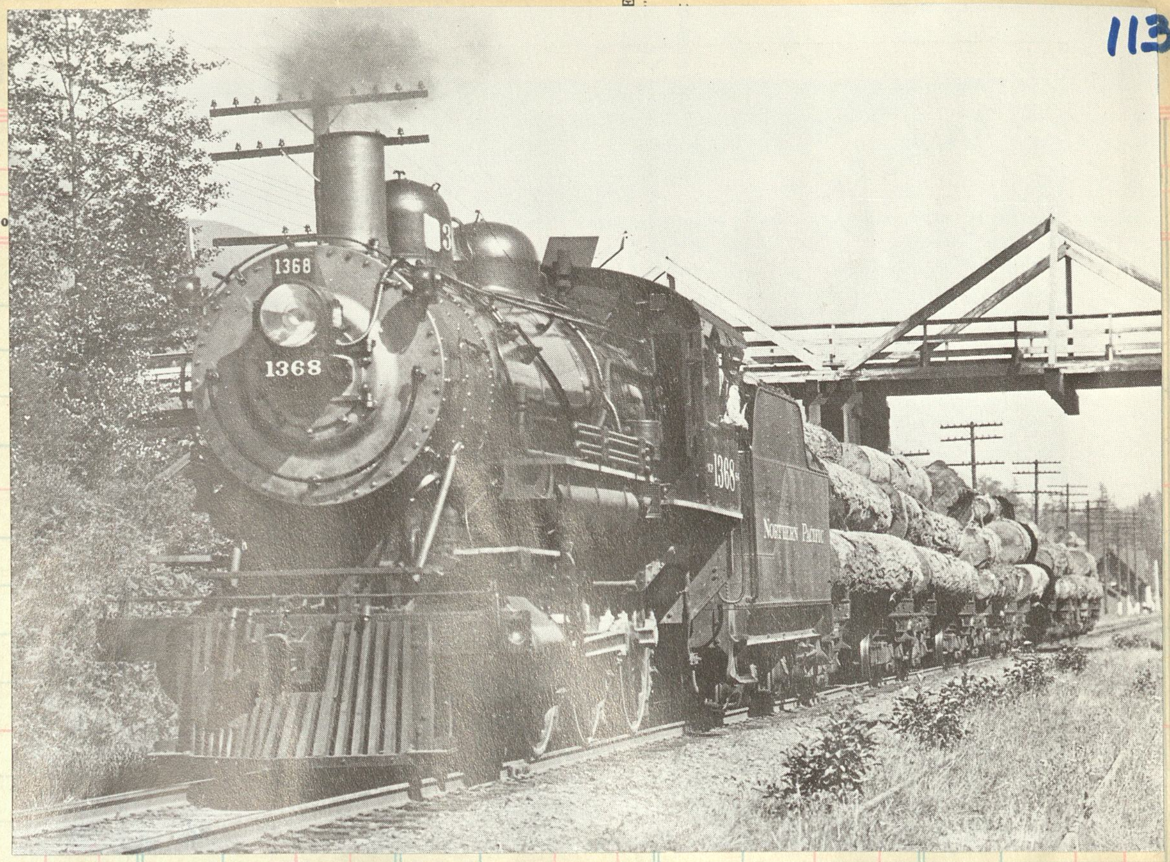

NP train #338 emerging from Stampede tunnel at Martin. The time is 10:42 a.m. on September 5, 1925. Eng 2118 [east end]

James A. Turner

The "Biggest Show on Earth" at Auburn, Wash.

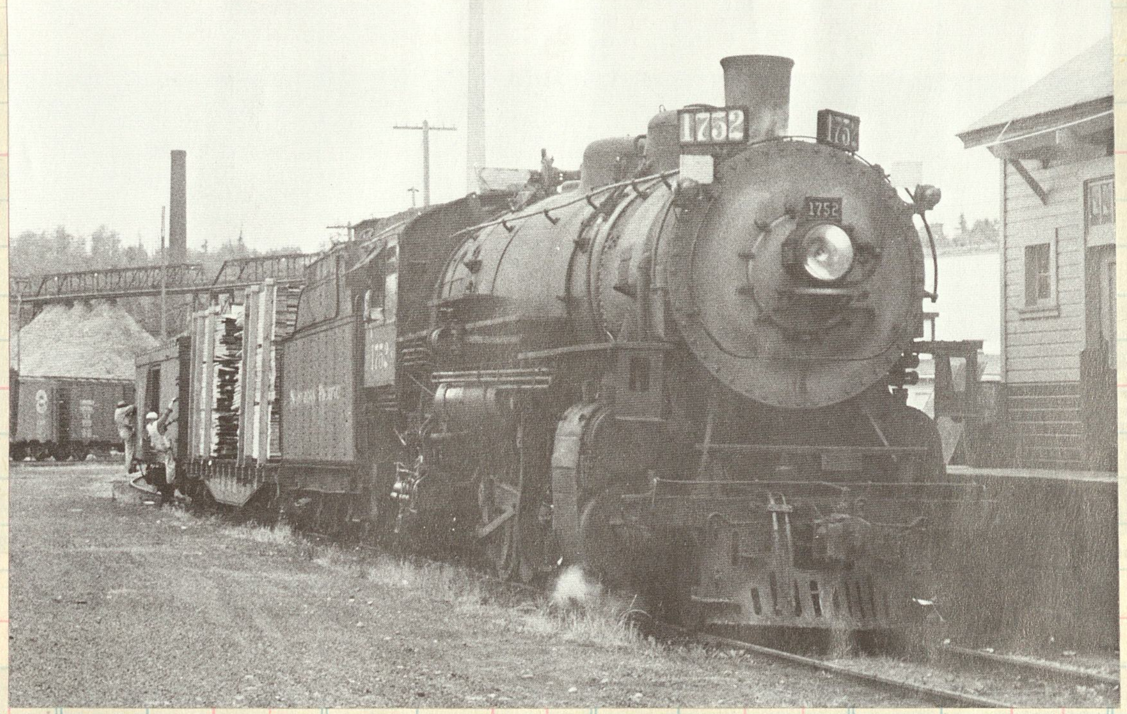


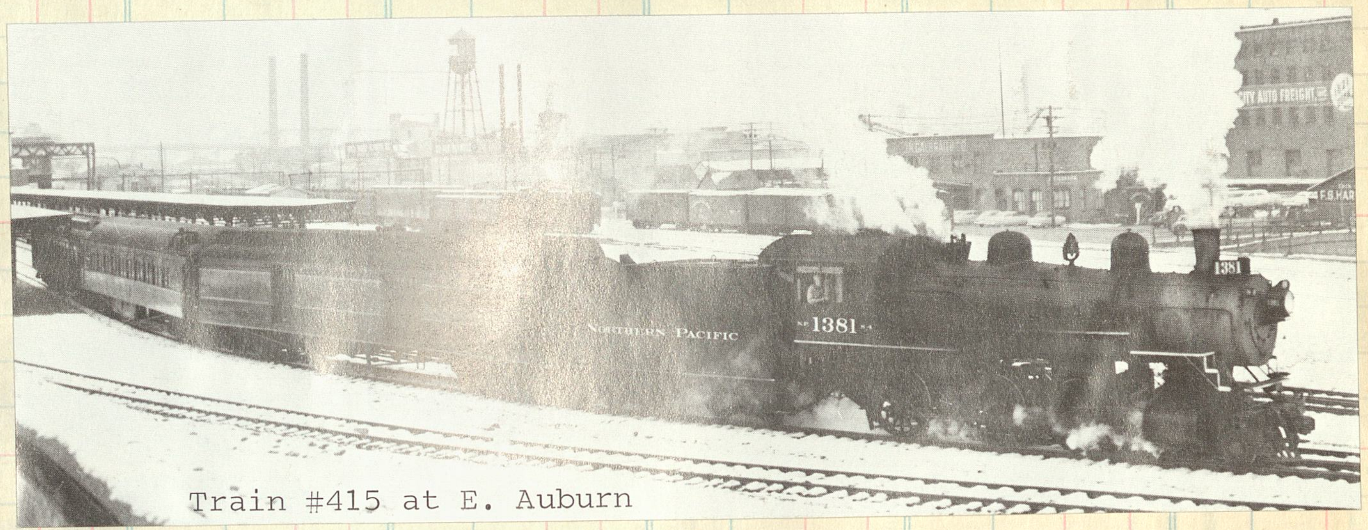
1810-1834 Brooks 1920



Shining like a new penny, freshly curried 1368, an S-4 ten wheeler BLW 1902, swings on to the main line with her train of logs at Kanasket, Wn.

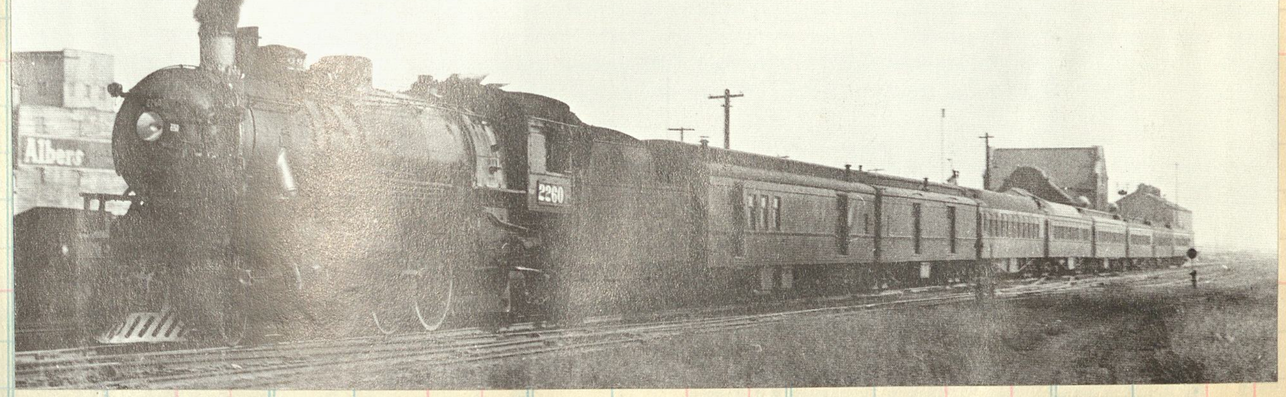
Mike 1752 [Brooks 1917 c/n 57944 1750-1769] works the yard at Shelton, Wash. Conn with Peninsular Ry.



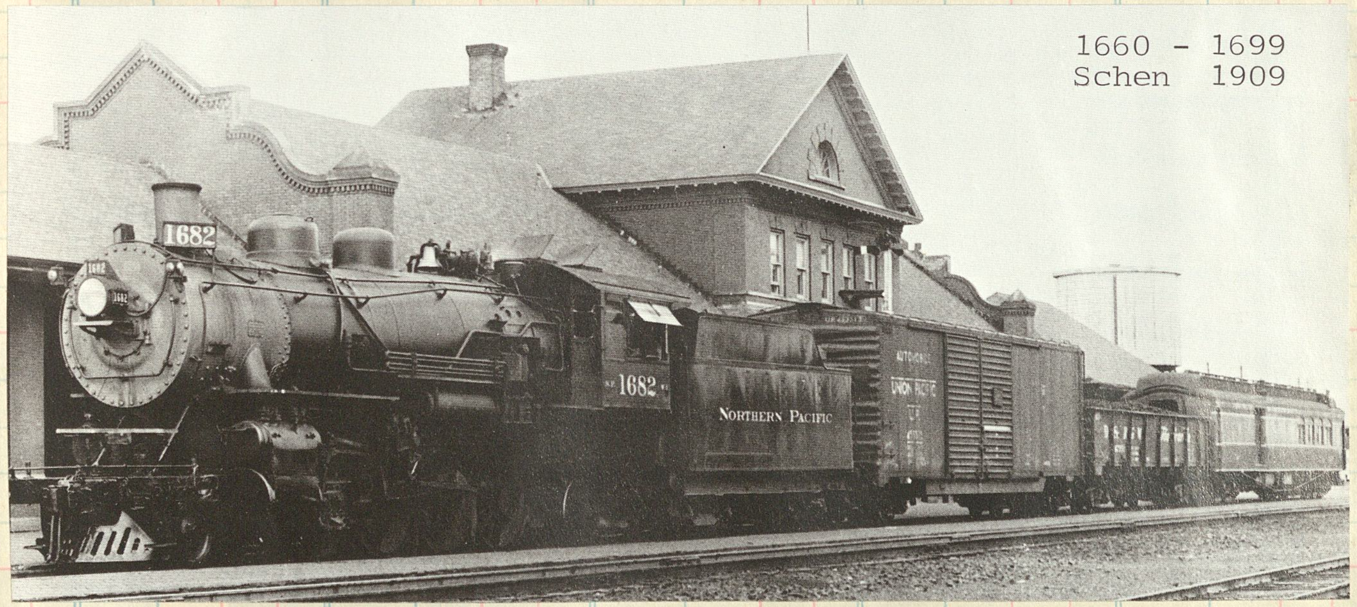


Train #415 at E. Auburn

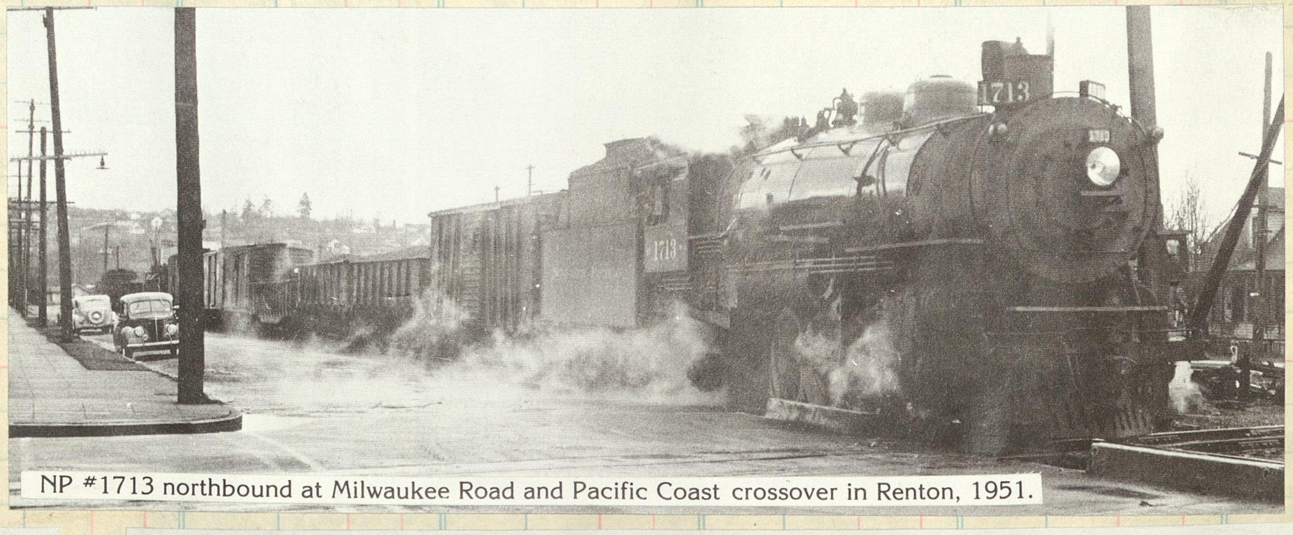
A big Q-6 Pacific takes Trn #5, the Spokane-Seattle day run, out of Ellensburg, Wn



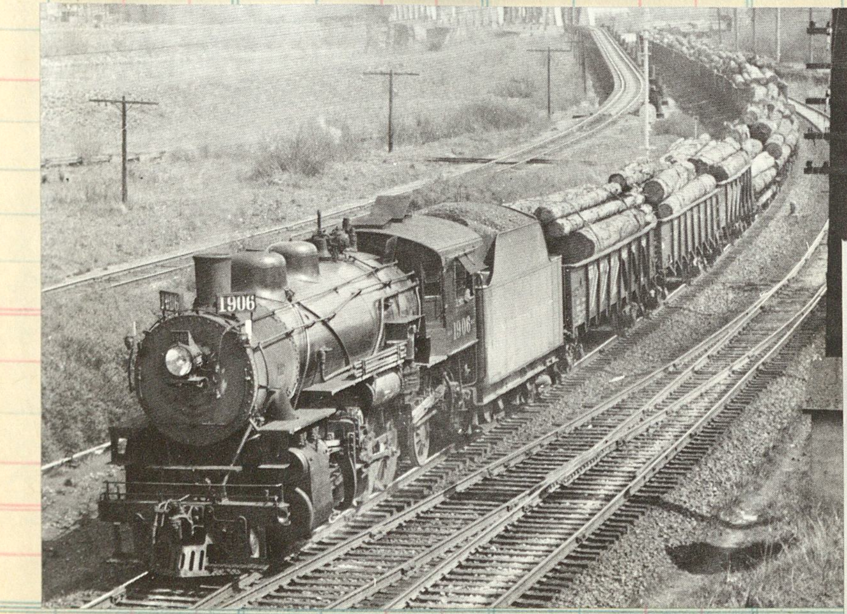
1660 - 1699
Schen 1909



NP mixed train for Raymond and South Bend, Washington standing at Centralia depot in the early 1950's.

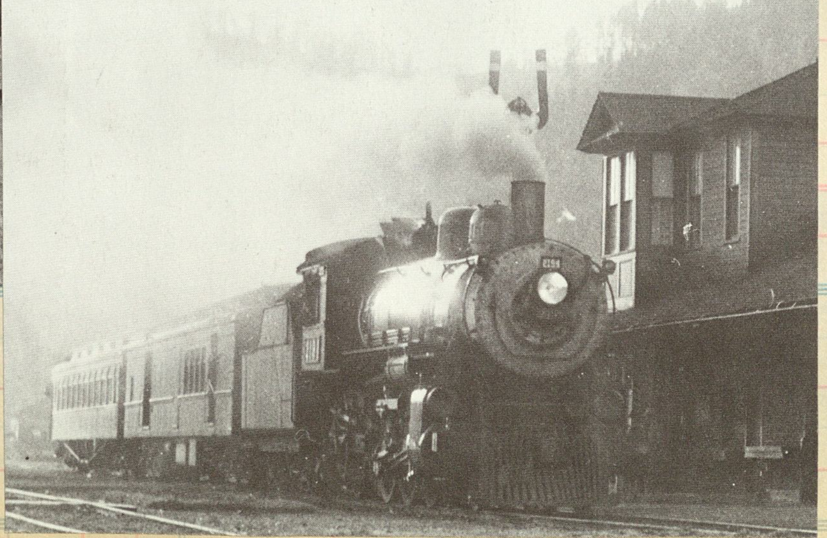


NP #1713 northbound at Milwaukee Road and Pacific Coast crossover in Renton, 1951.

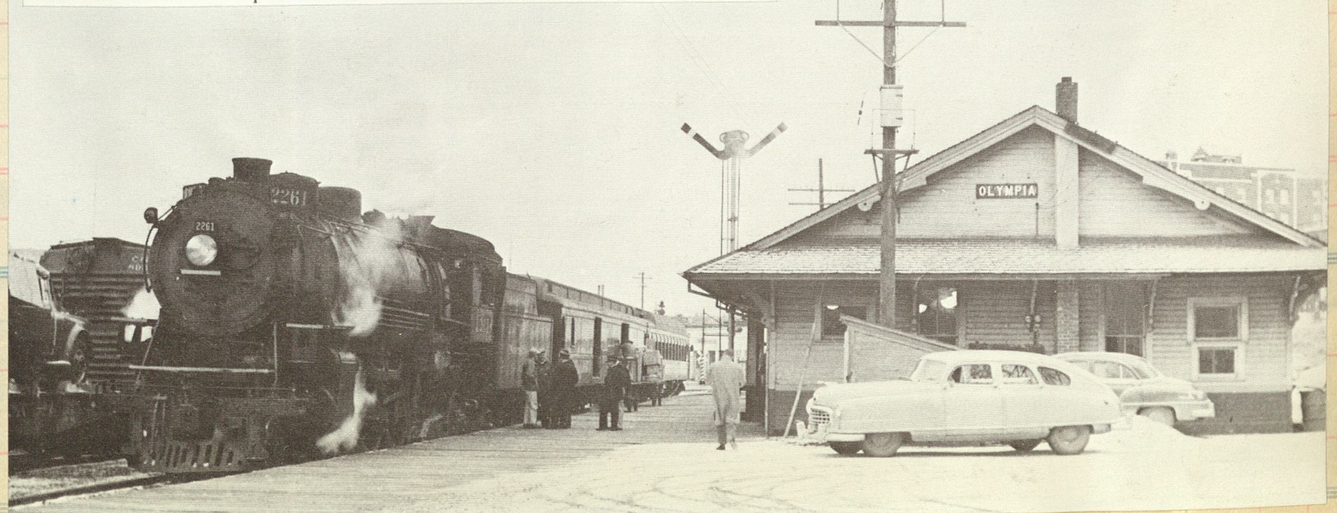


Extra 1906 thumps thru Reservation

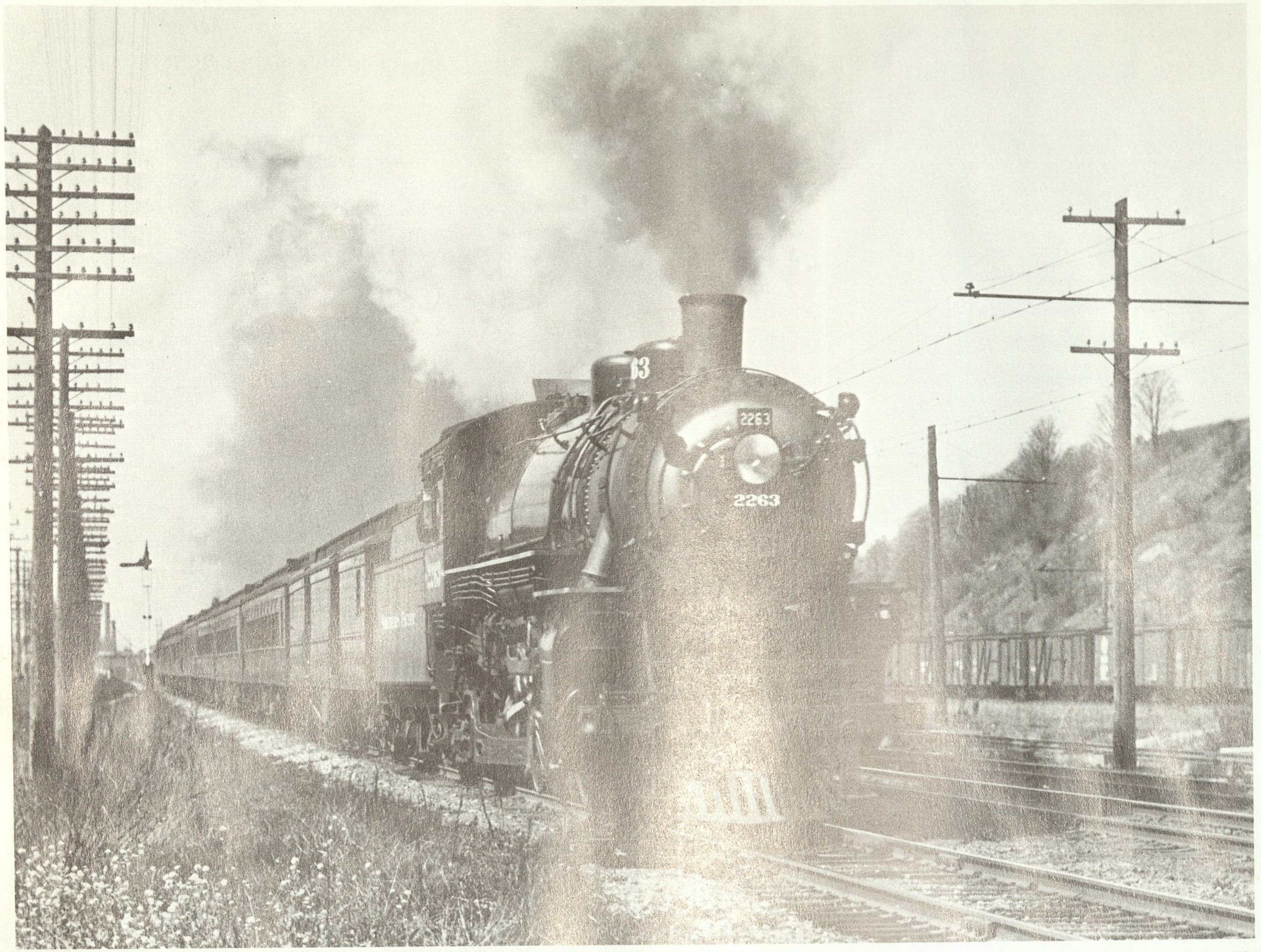
The 2194 with the Grays Harbor-Seattle local at Gate, Wash.



NP #2261 on train #461 at Olympia, Washington February 14, 1956. The last trip was made four days later. Train was en route from Seattle to Hoquiam.



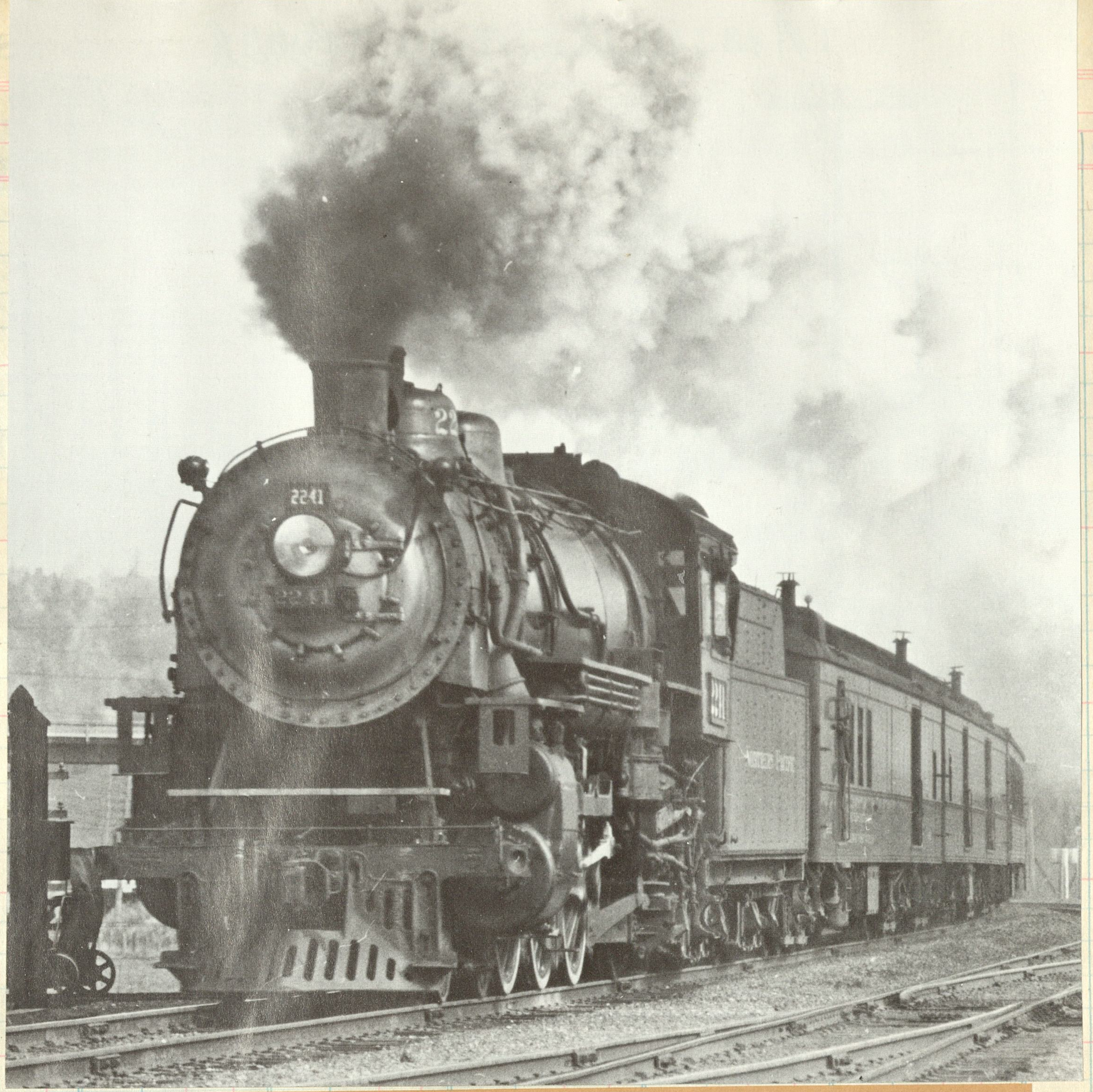
Sold Amount



James A. Turner

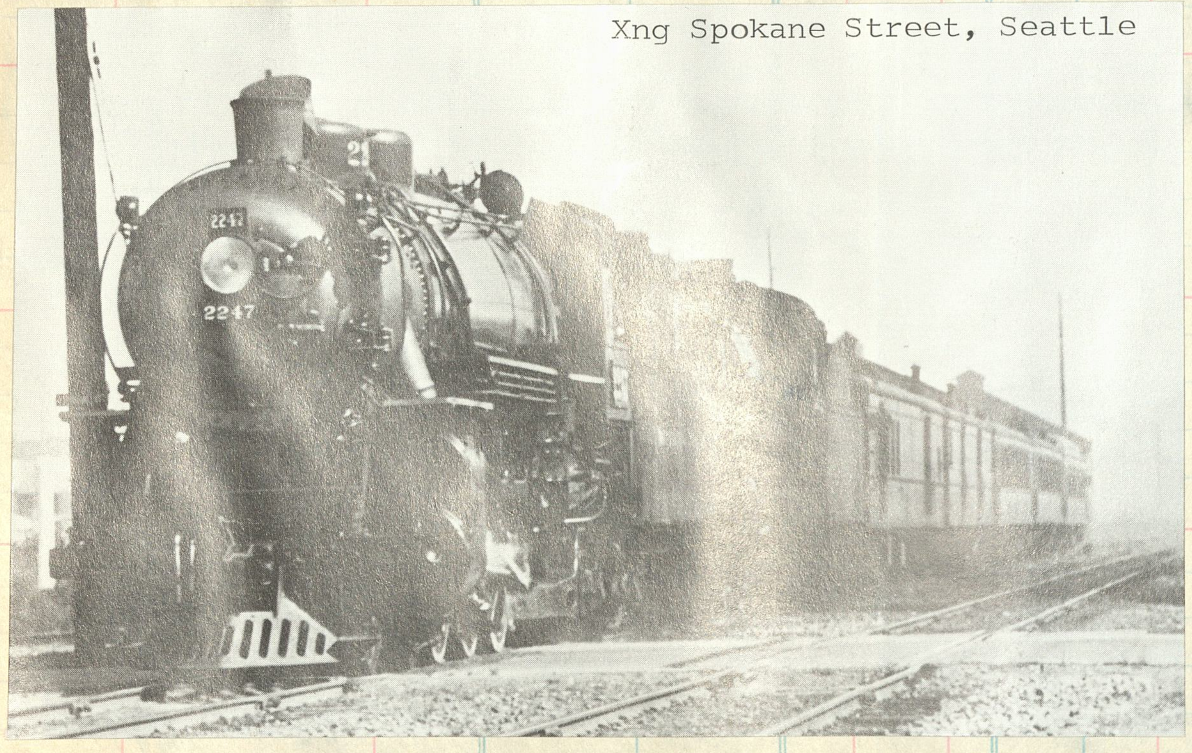
NP #2263 southbound by Georgetown carbarn, April, 1938.

What greater reward could we ask than to go back in time, four and a half decades, to be with Jim Turner along the right of way outside Seattle and watch the 2263 charge by in robust sight and sound!

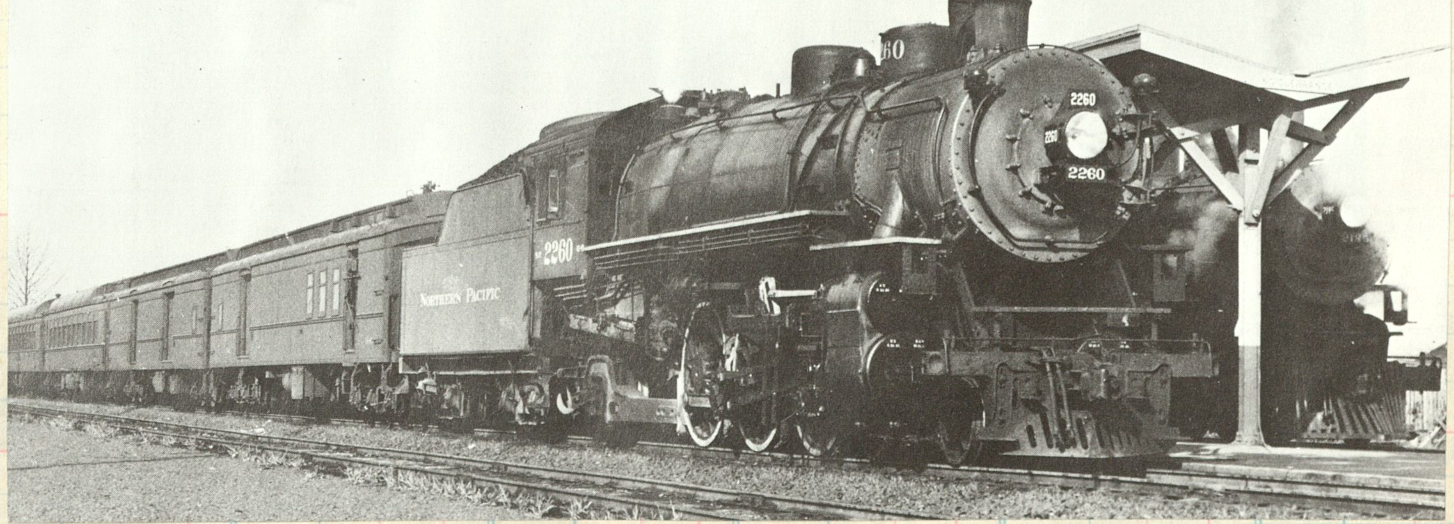


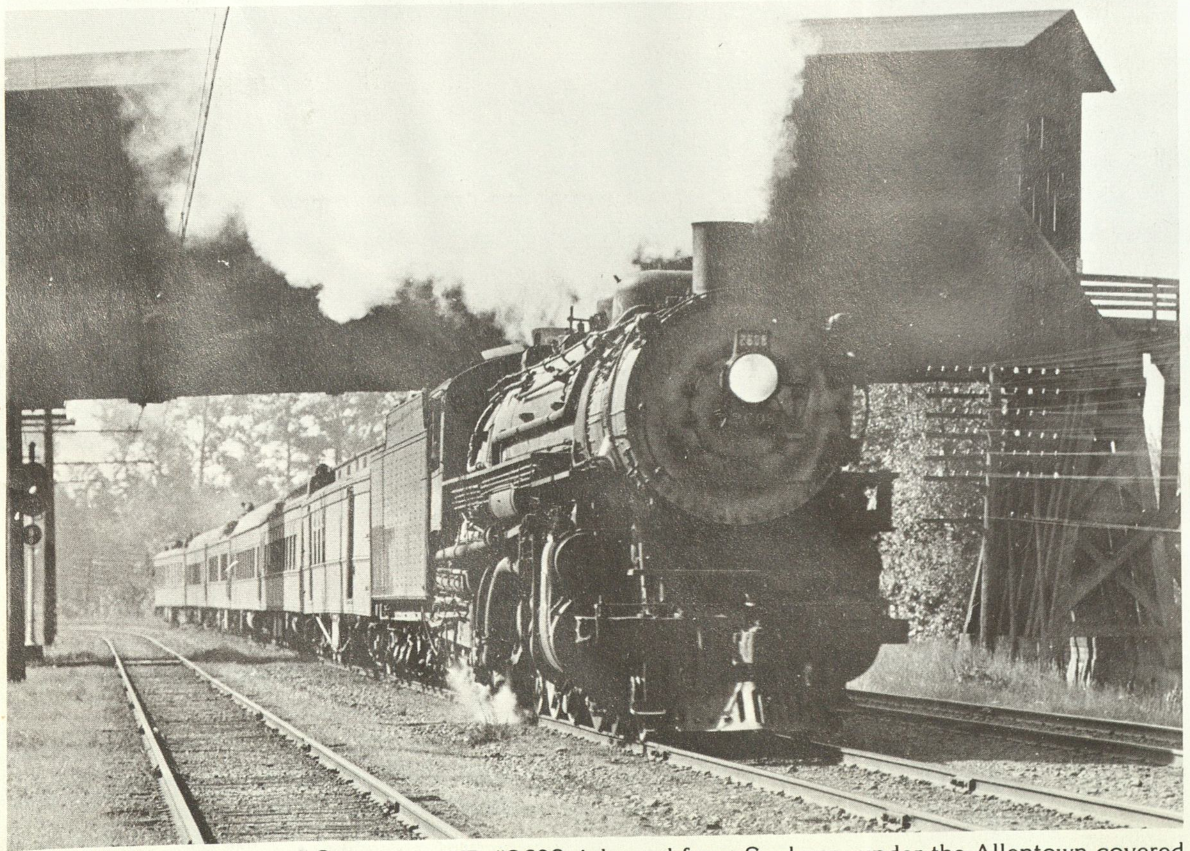
With a look of grim determination the 2241 storms thru Black River Jct (south of Seattle) with the morning job for Spokane.

Xng Spokane Street, Seattle



NP #2260 on train #4 at East Auburn with #2185 and the Tacoma connection on the adjoining track, 1946.



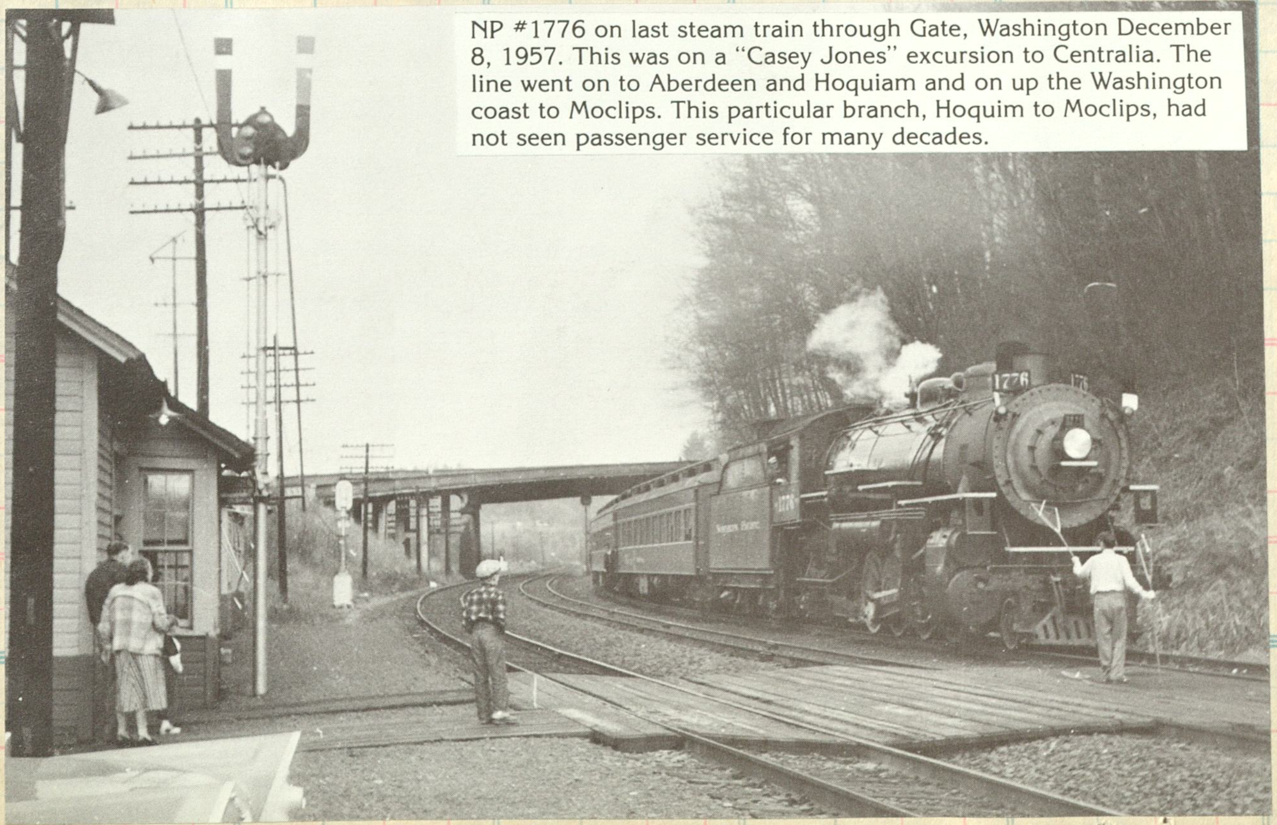


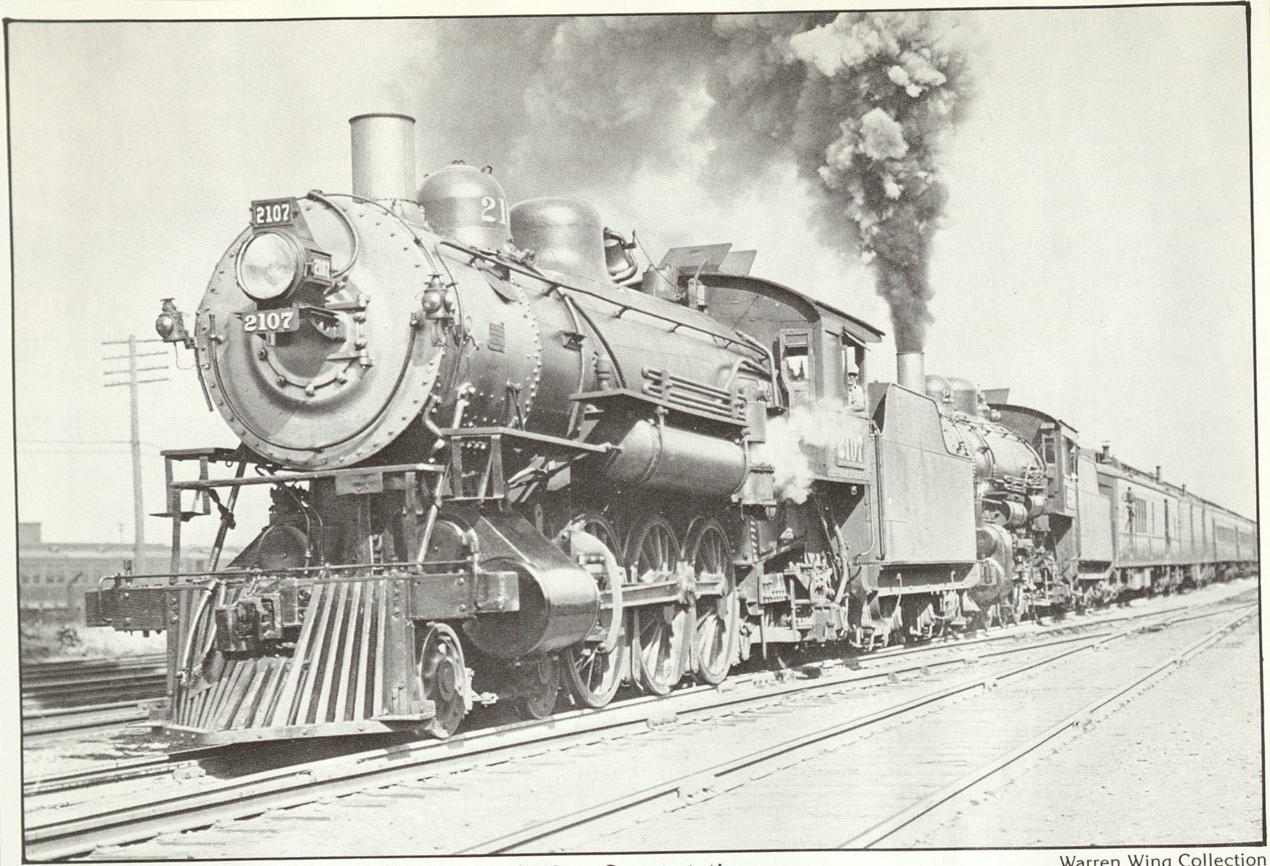
James A. Turner

Trn #3

NP #2608, inbound from Spokane, under the Allentown covered bridge in the 1930's.

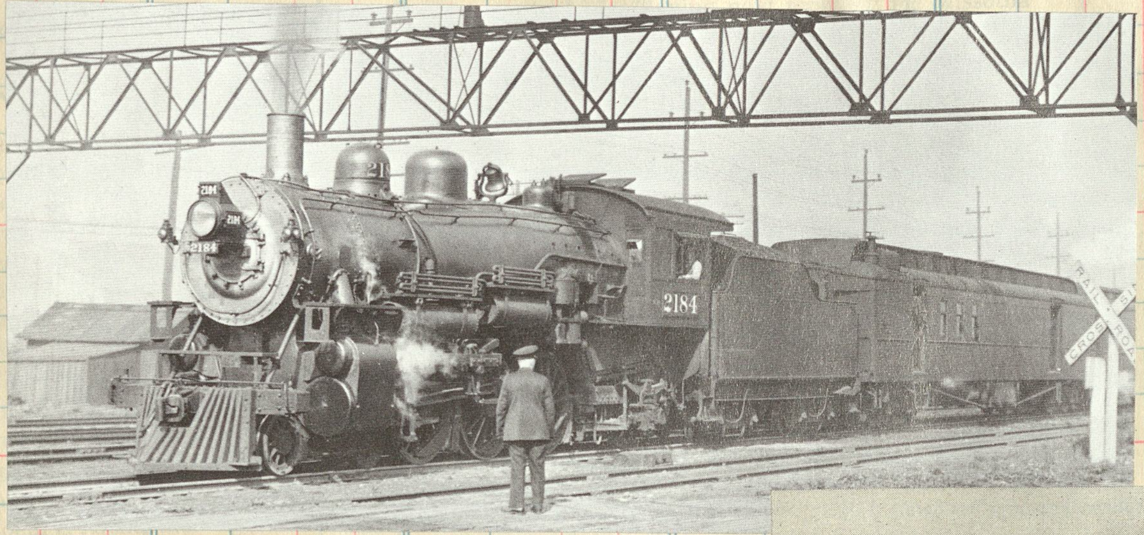
NP #1776 on last steam train through Gate, Washington December 8, 1957. This was on a "Casey Jones" excursion to Centralia. The line went on to Aberdeen and Hoquiam and on up the Washington coast to Moclips. This particular branch, Hoquim to Moclips, had not seen passenger service for many decades.



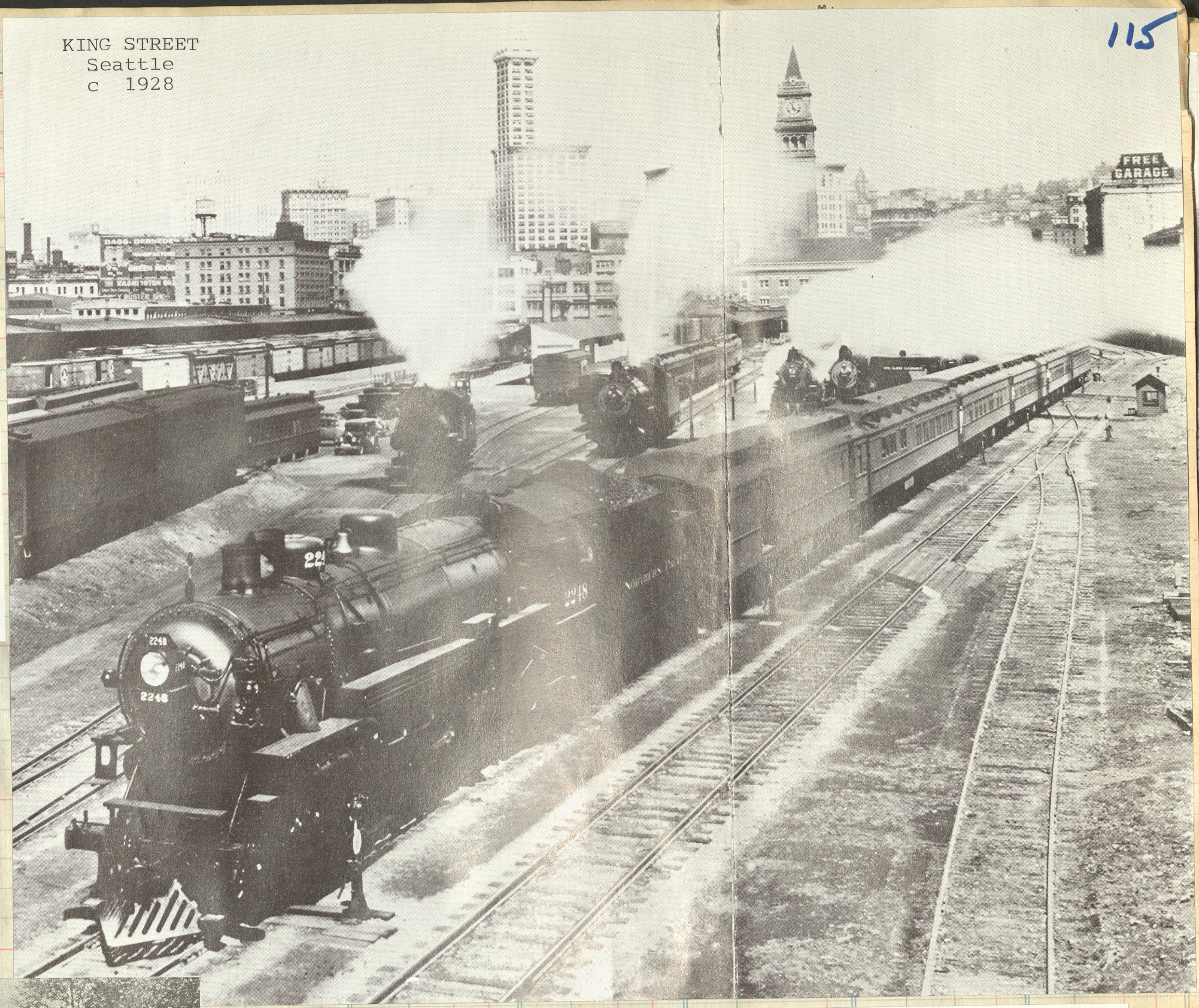


Warren Wing Collection

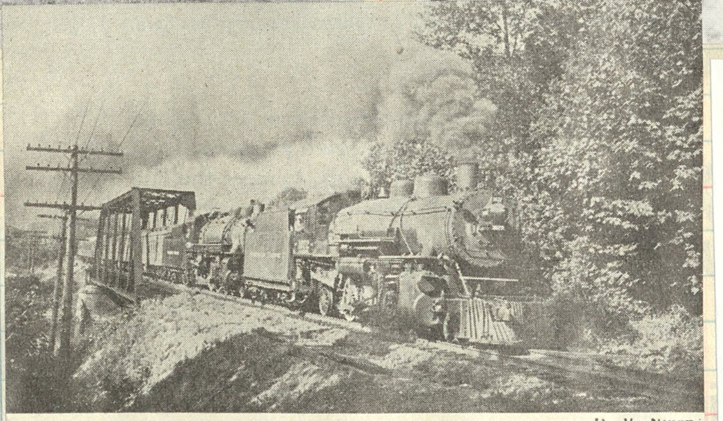
Argo Crossing was 3.2 miles south of Seattle's King Street station. Here is NP train #2 at Argo on June 28, 1924. It left Seattle at 9:15 a.m.



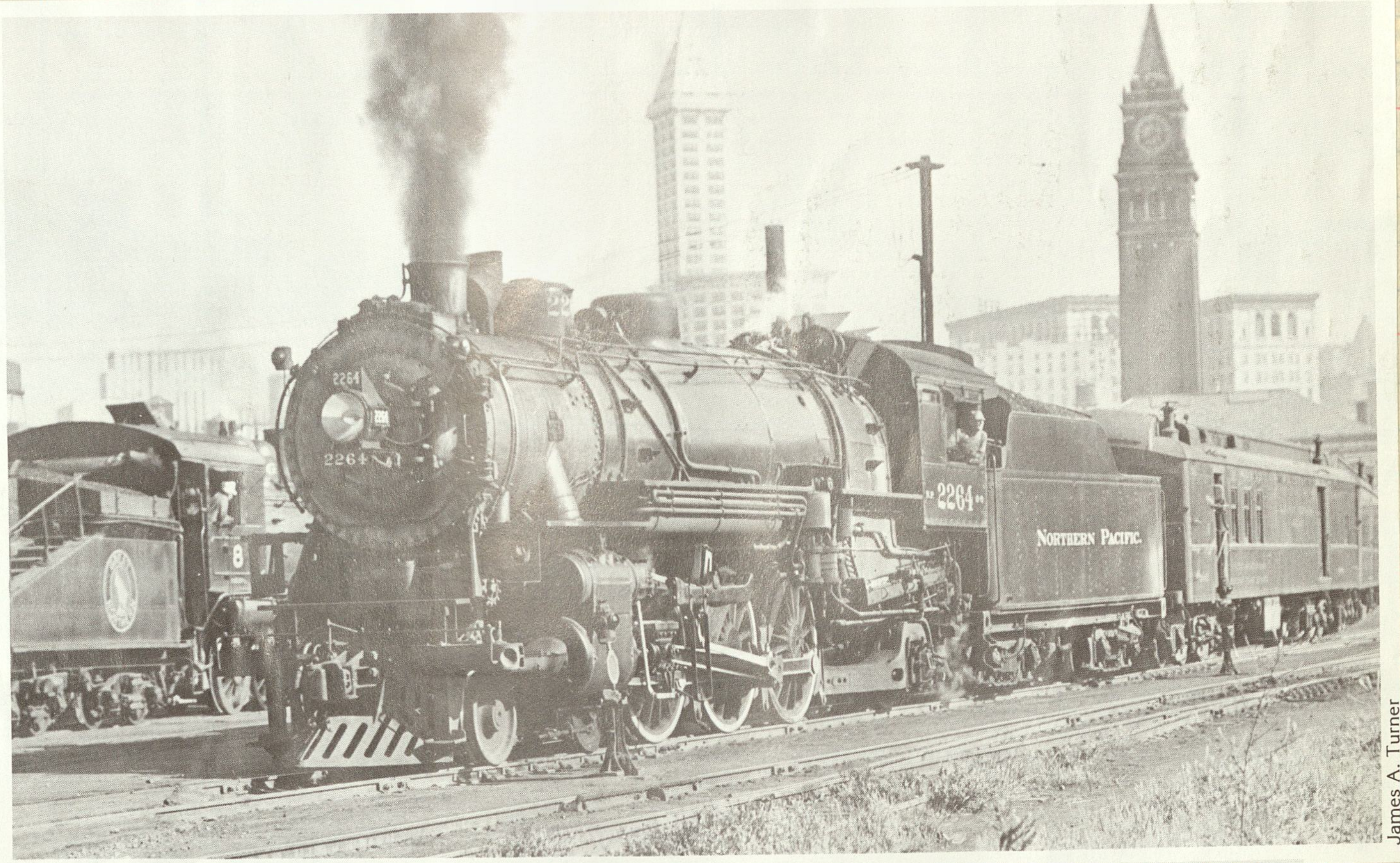
At Argo


KING STREET
Seattle
c 1928

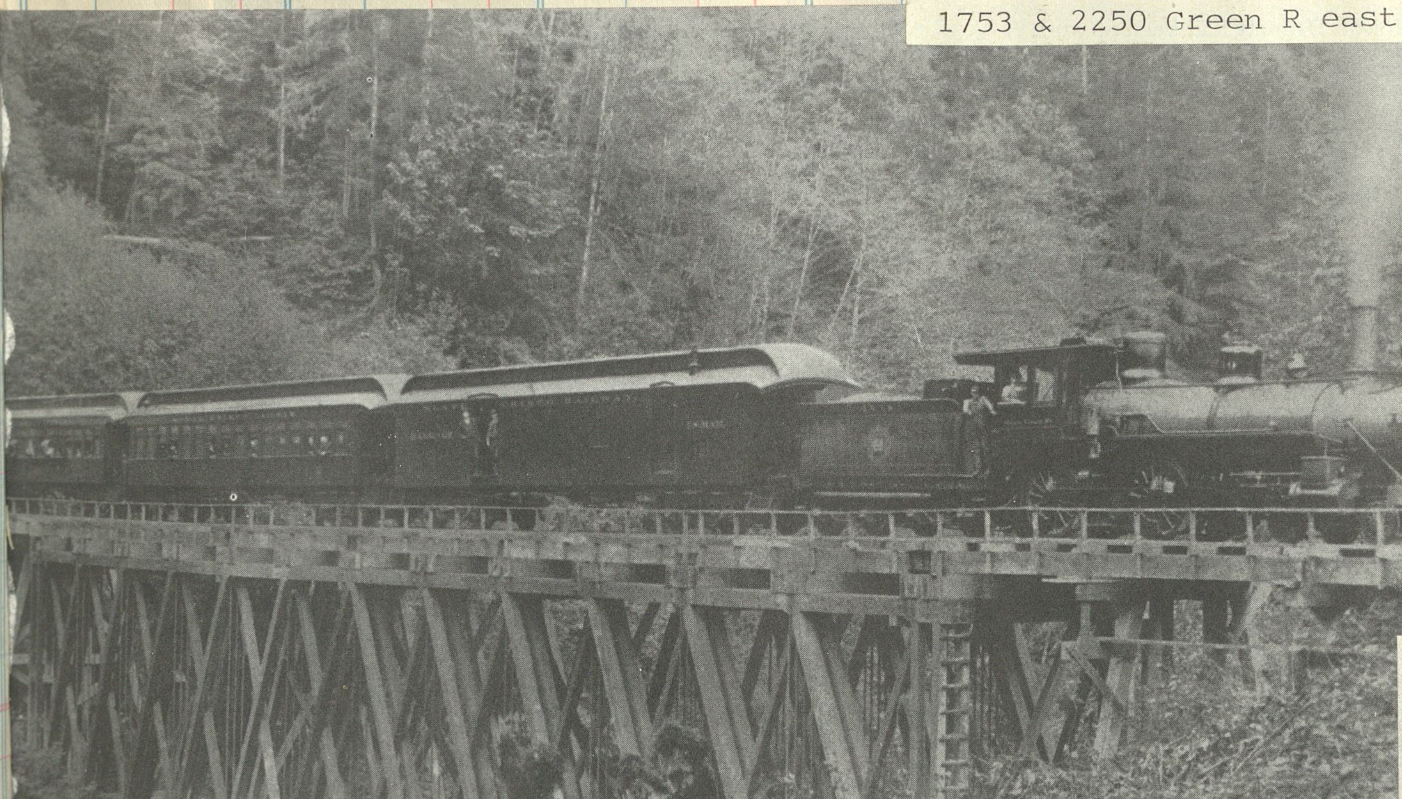
FREE GARAGE
2248

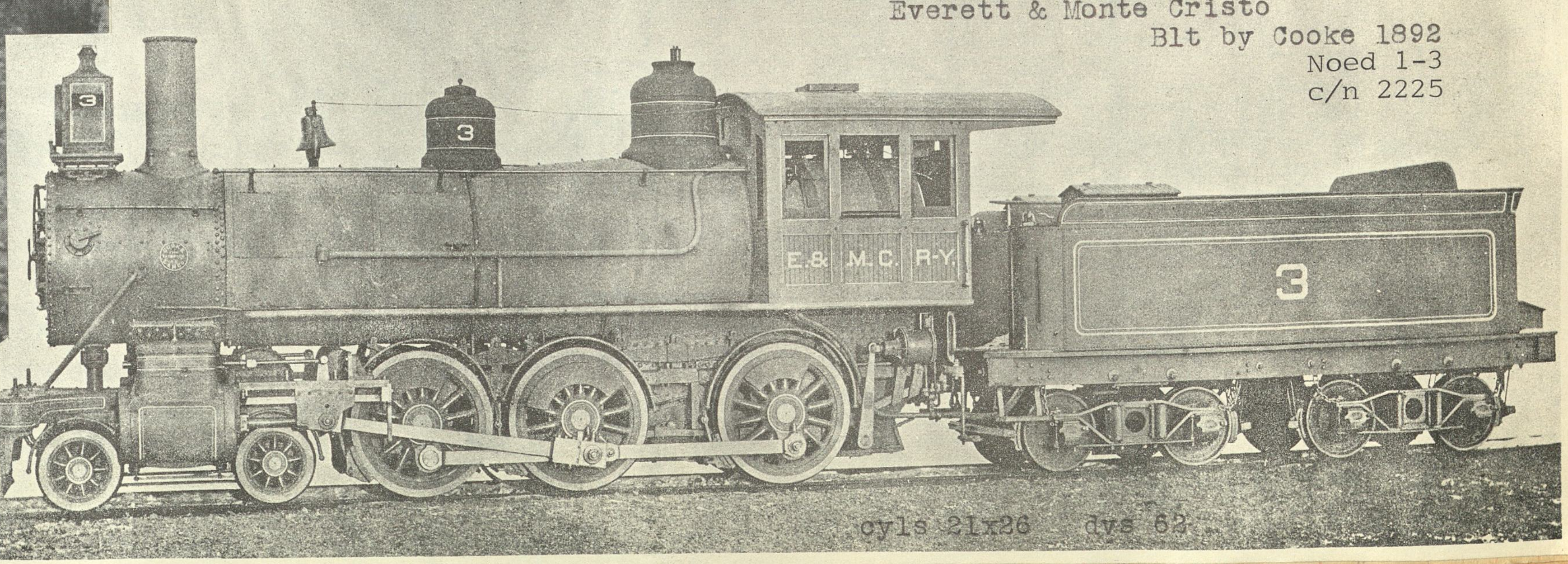

R. V. Nixon.

1753 & 2250 Green R east of Auburn


2264
NORTHERN PACIFIC

James A. Turner

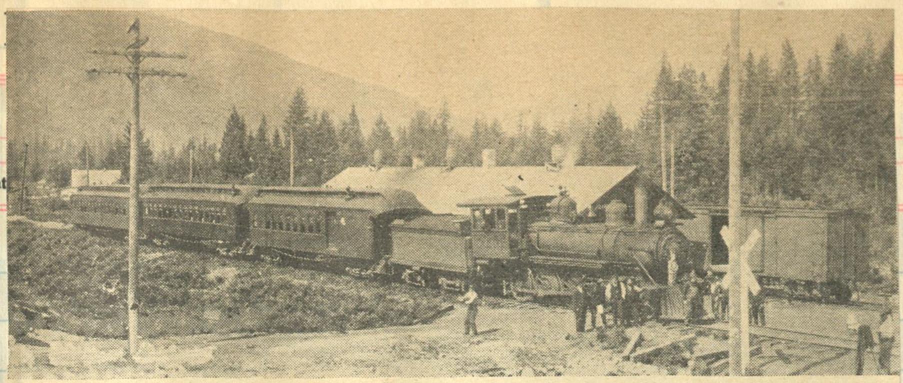

Everett & Monte Cristo "varnish" poses on the bridge over the Stillaguamish River east of Granite Falls. (Wn)


Everett & Monte Cristo
Blt by Cooke 1892
Noed 1-3
c/n 2225

cyls 21x26 dvs 62

W. R. McGee Photo

NP engine No. 1387 at speed nearing DeSmet on August 8, 1939, heading train 256 from Wallace for a Missoula connection with the North Coast Limited. One would hope that the excitement of these days — when the Coeur d'Alene Branch was at its height — will be a lasting memory.

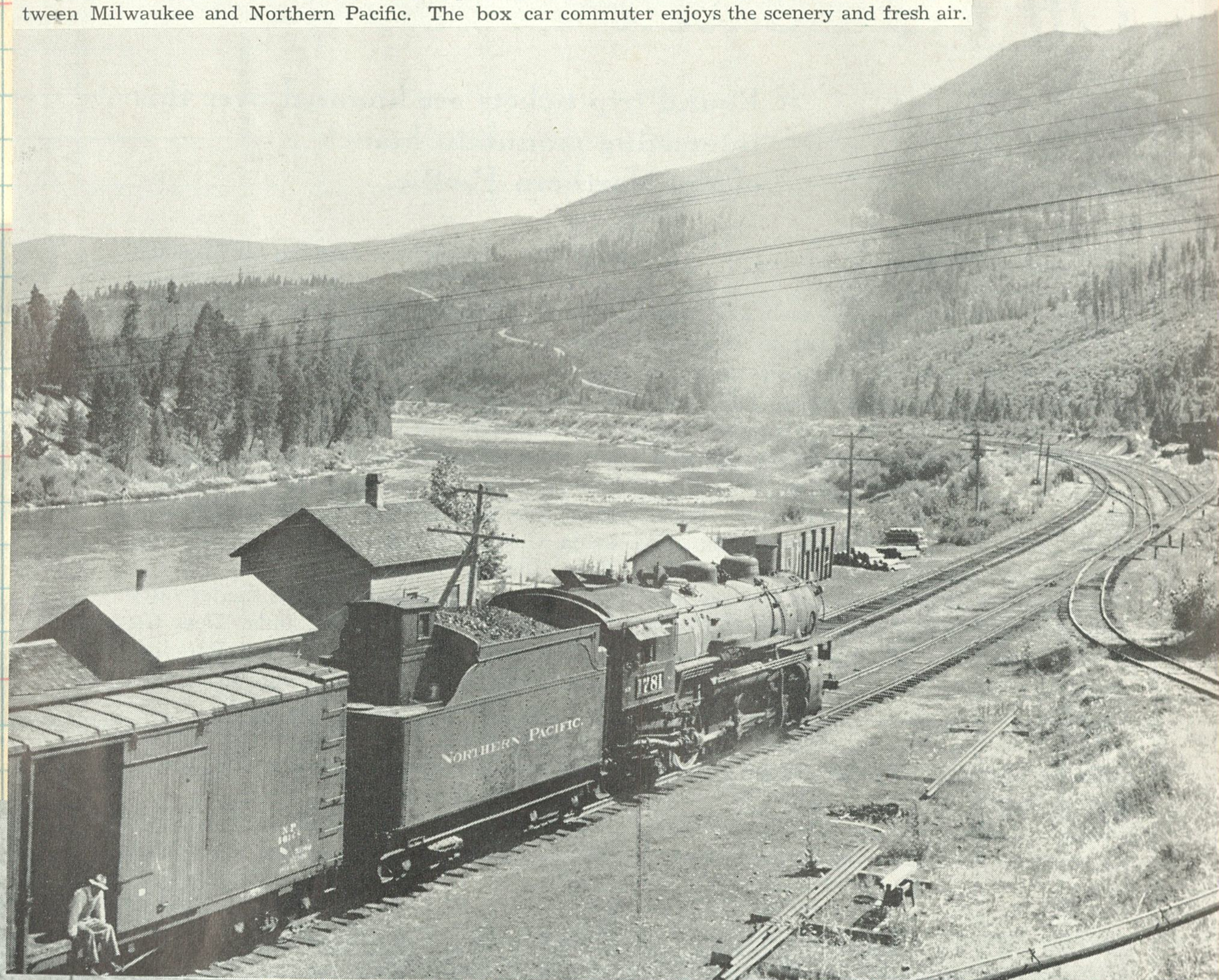


TRUCKS AND BUSES HAVE TAKEN THEIR JOBS AWAY

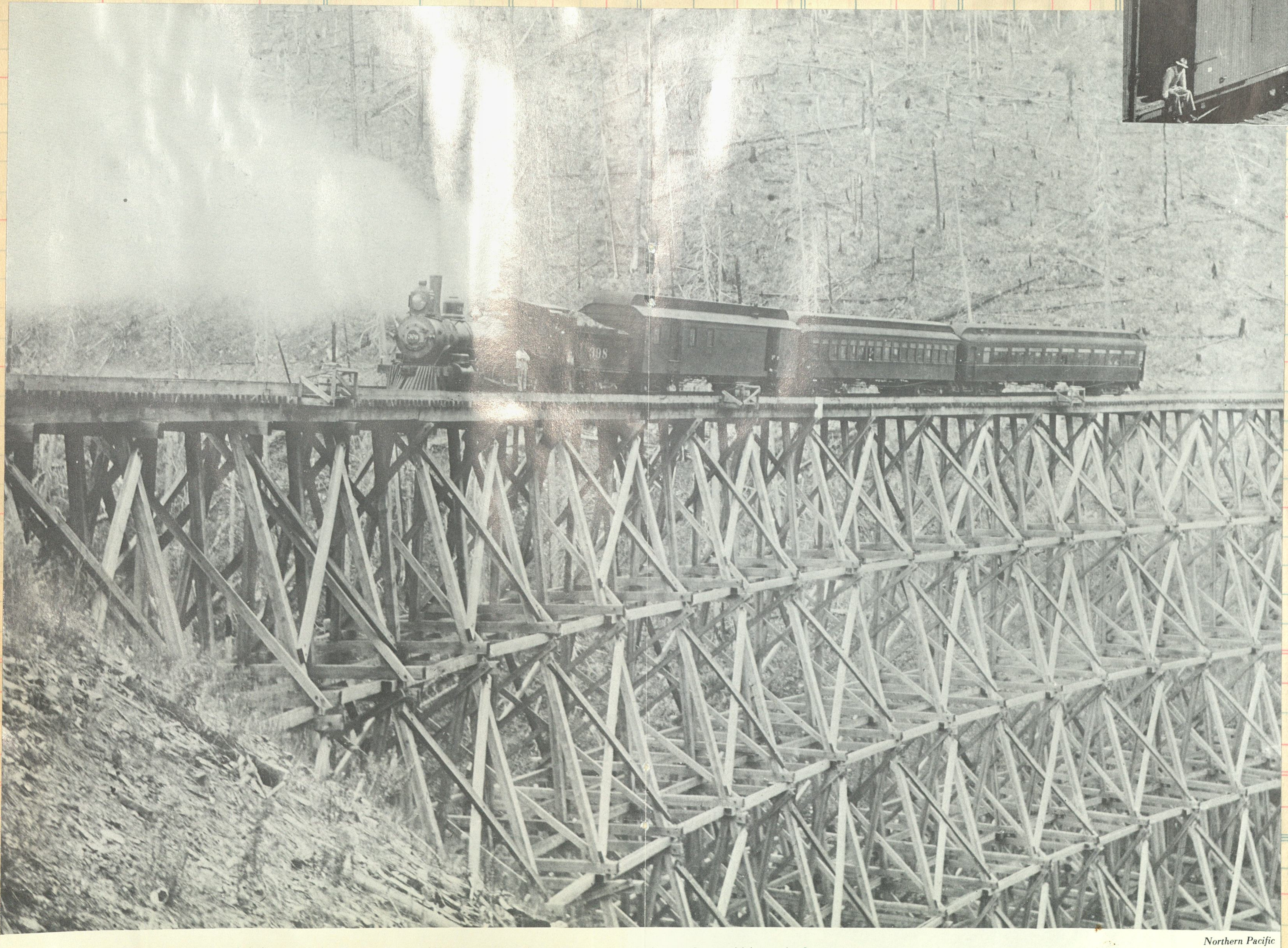
In the beautiful Cascade Mountains of Western Washington this train ran up to 1913 on a Northern Pacific Railroad branch. Brother T. H. Bradford, Div. 399, says that in recent years trucks and buses have captured the traffic.

Eastbound freight leaves St. Regis.

This picture was taken last September from the embankment of the Milwaukee Road approach to its Clark Fork Bridge, which is just out of the picture to the left. On the right is the connecting track between Milwaukee and Northern Pacific. The box car commuter enjoys the scenery and fresh air.



o my beloved Aunt Frank
and long-time resident of the
very influential in my becoming a
to my pestering her for trips
was not complete without a
m her kitchen window I could

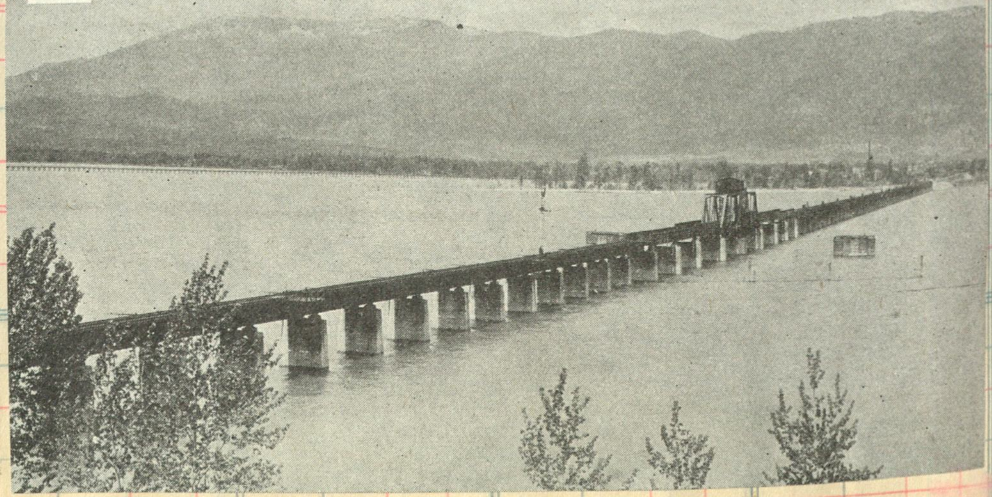


Northern Pacific

A short passenger consist with a Schenectady built ten-wheeler passes over one of Northern Pacific's huge trestles believed to be near Dorsey, Idaho on the Coeur d'Alene line. The turn-of-the-century photo was made after the original bridge was destroyed by fire, evidenced by the lack of timber on nearby hillsides. In 1900 the NP operated a round-trip passenger train (Nos. 142-143) from Wallace to DeSmet, Idaho (128 miles) and return.

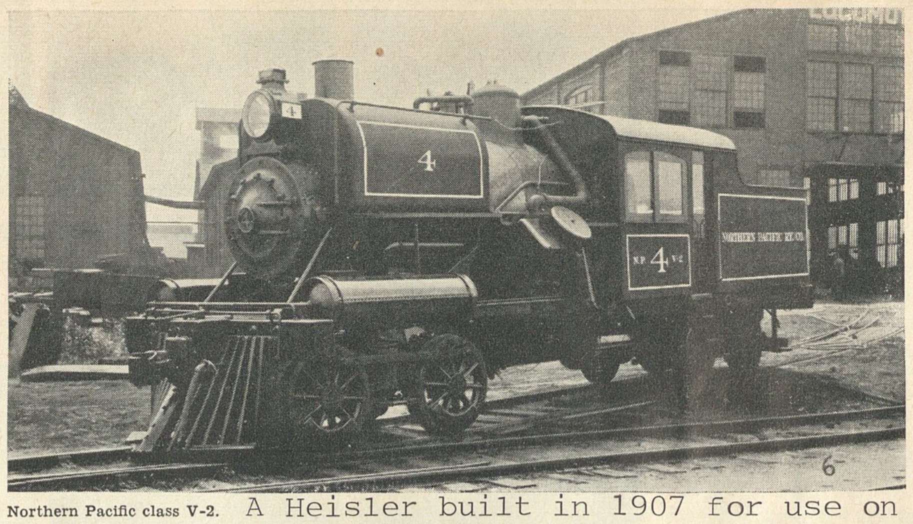
Cabinet Gorge, Idaho, on Northern Pacific Railway

**On the short stretch through Idaho, NP trains cross a 4769-foot bridge over an arm of Lake Pend Oreille at Sand Point**

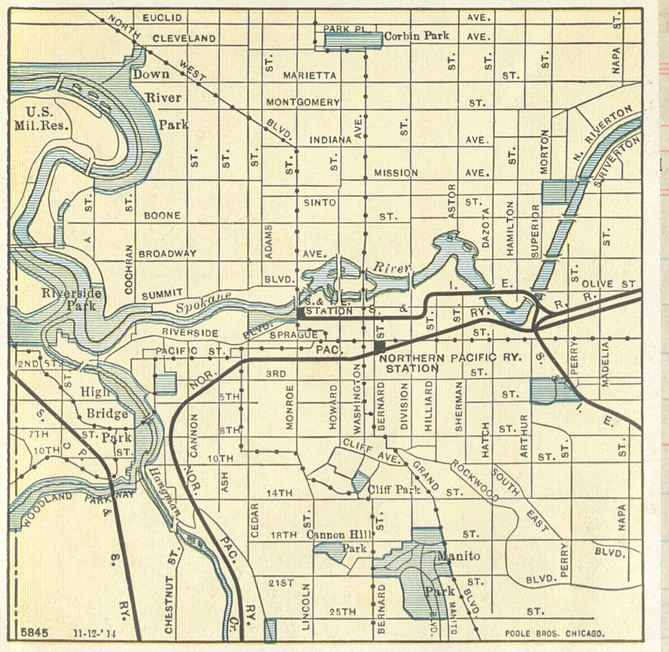


117

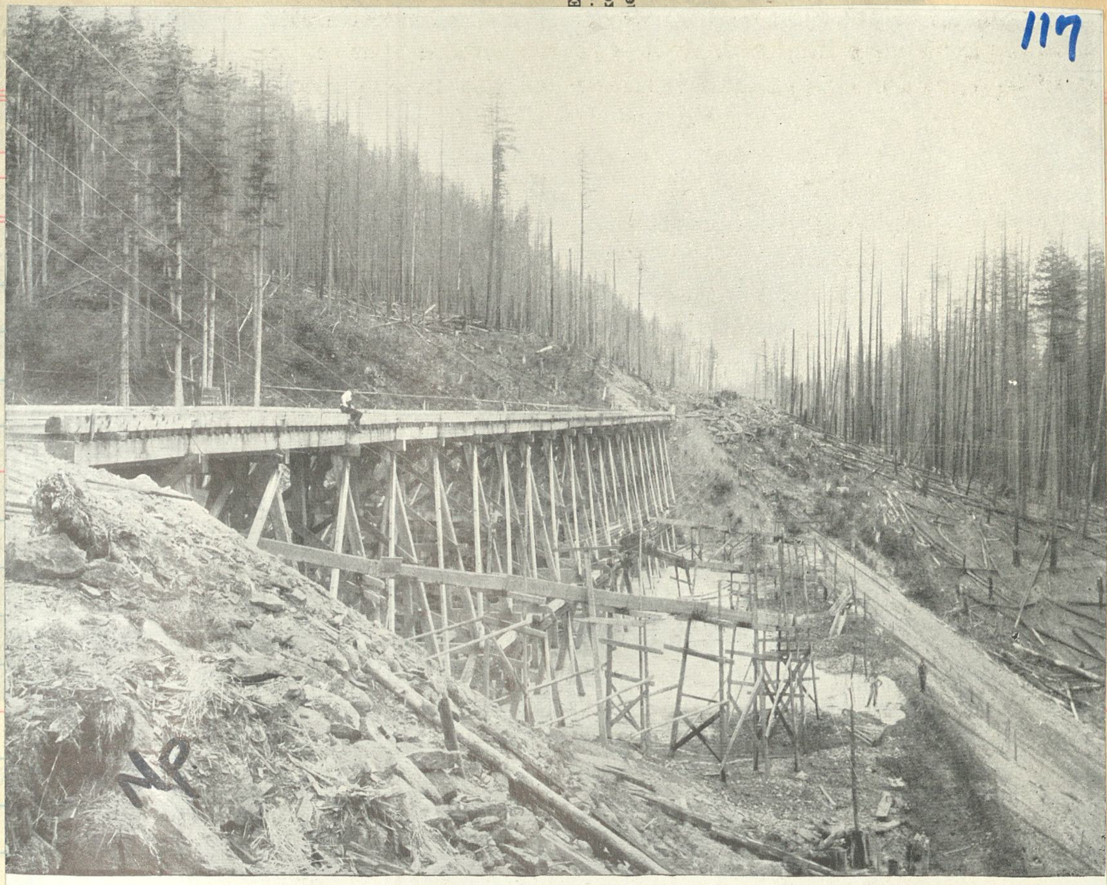
1914



Northern Pacific class V-2. A Heisler built in 1907 for use on branch between Vancouver Jct and Yacolt, Wash.


EUCLID
CLEVELAND
Corbin Park
Down River Park
U.S. Mil.Res.
MARIETTA
MONTGOMERY
INDIANA
MISSION
SINTO
BOONE
BROADWAY
SUMMIT
Riverside Park
Spokane River
S.&I.E. STATION
NORTHERN PACIFIC RY. STATION
High Bridge Park
Cliff Park
Cannon Hill Park
Manito Park
5845
11-12-'14
POOLE BROS. CHICAGO.

NORTHERN PACIFIC RY. SPOKANE ELECTRIC LINES

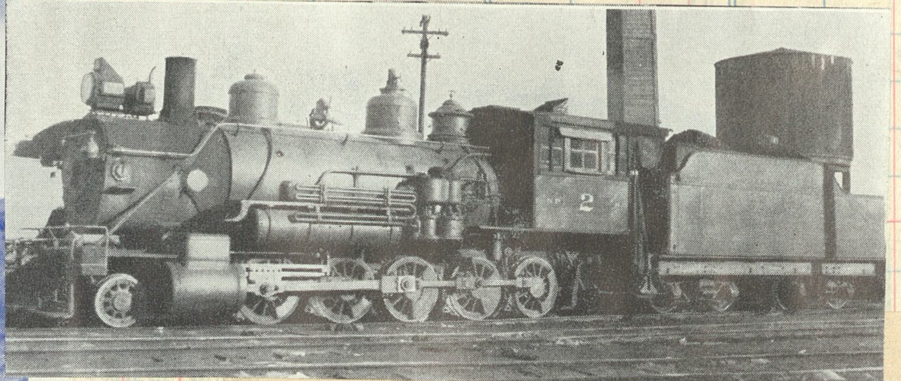


SLUICING A TRESTLE: THE LATEST METHOD OF BUILDING AN EMBANKMENT.

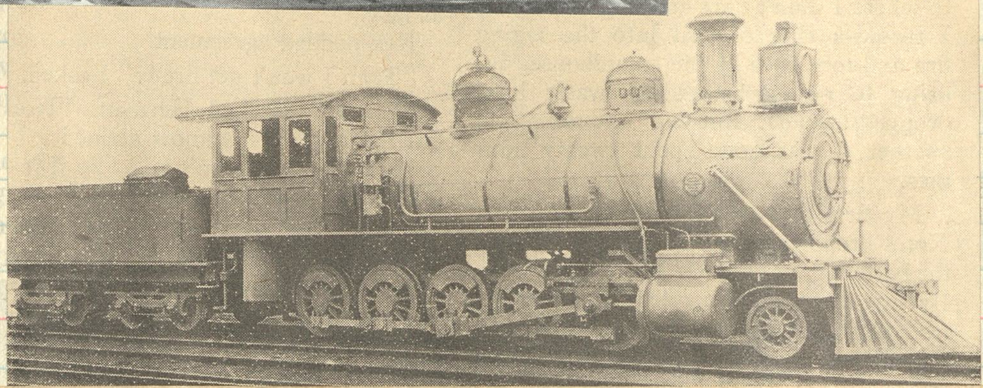
W. R. McGee, 418 N B St., Livingston, Mont.

1

No. 4, the Northern Pacific's day local between Seattle and Spokane, offers a fine all-day view of the verdant Cascades and the drier valleys and plains of central Washington. Here it is, behind engine 2251, threading its way down the Yakima River north of Yakima, heart of the apple country. Both No. 4 and No. 5, its westbound mate, carry reserved seat coaches in which, for a coach fare plus a 50-cent seat charge, one may have an individual lounge chair, the equivalent of a parlor car in any man's language. At Pasco on the Columbia River these trains connect with Spokane, Portland & Seattle trains from and to Portland, offering similar daylight service through the scenic Columbia River gorge.

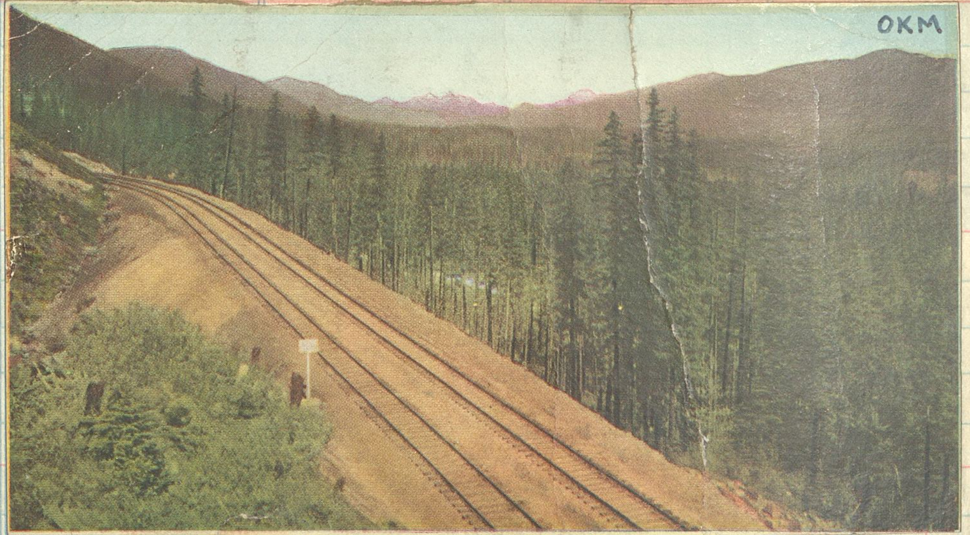


$500

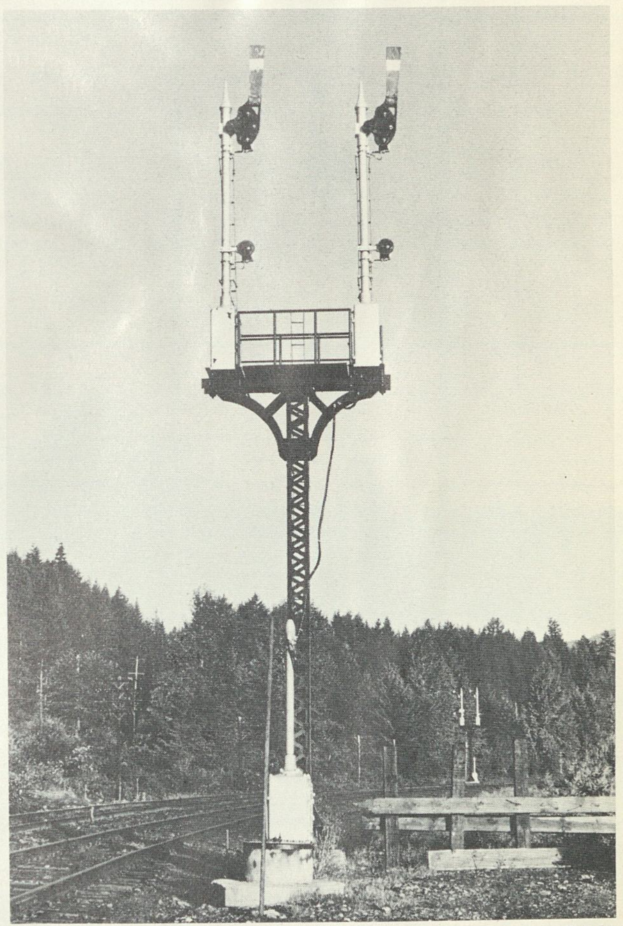


From the beginning the Northern Pacific was a firm believer in big power. In 1886 Baldwin delivered a pair of 2-10-0's, nos 500 & 501, as "the heaviest engines in the world" for pusher service on Stampede Pass. c/n 8168. Cyls 22x26 dvs 45" wt 140,950#

OKM



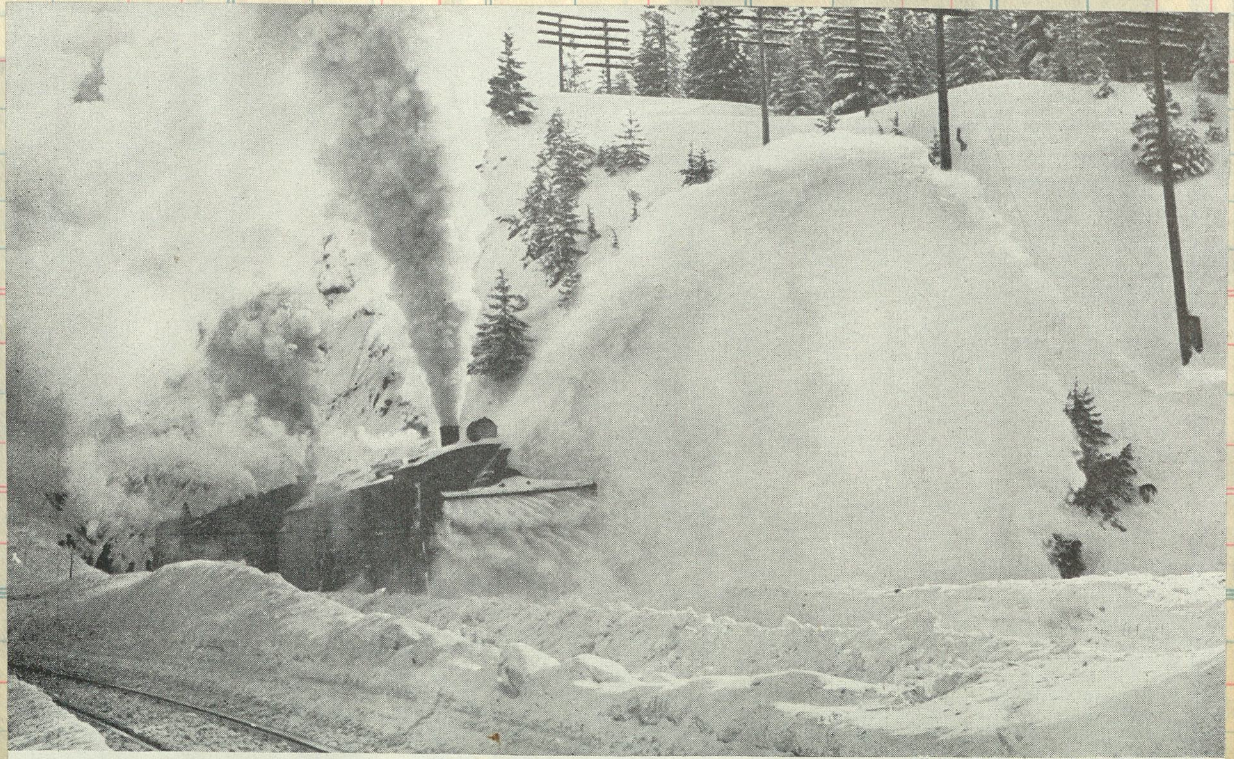
CROSSING THE PICTURESQUE CASCADE MOUNTAINS



Rick Leach

*The eastern approach to Stampede Pass at Easton is governed by this Absolute Signal. A train leaving Martin, 9 miles upgrade at the east entrance of the tunnel, will set this signal to stop even though three blocks distant. When the blade is in stop position this is a stop signal, the most restrictive possible. On most roads, the lack of a number plate means when at stop it can be passed only with the permission of the dispatcher and at restricted speed. The blunt blade painted red with a white stripe and the lighted red lens below are a Northern Pacific indication for Absolute Stop in Automatic block territory.*

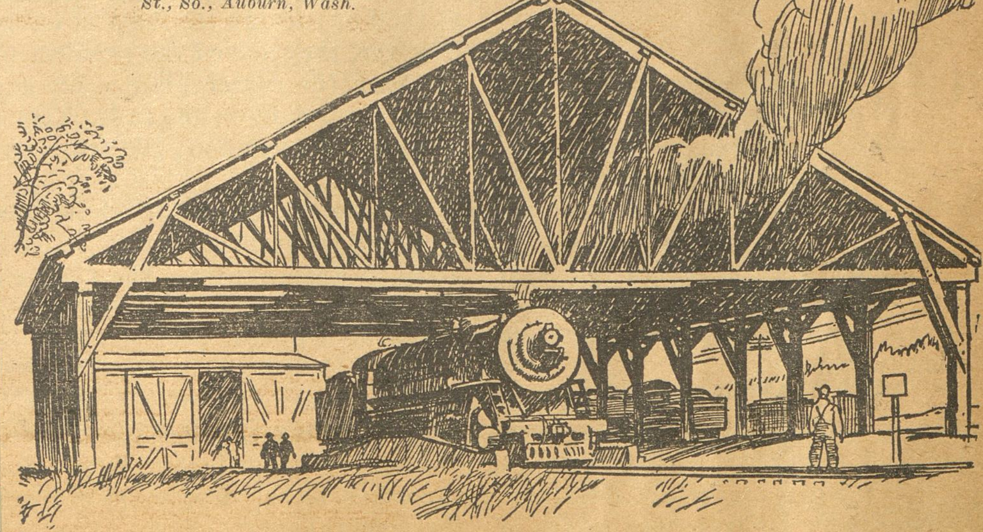
*A.* YAKIMA CANYON, WASH.



Albert Farrow, 138 10th St. S. Aubur

Eng 1682 pushes rotary #10 as they clear trackage at the east end of Stampede Tunnel

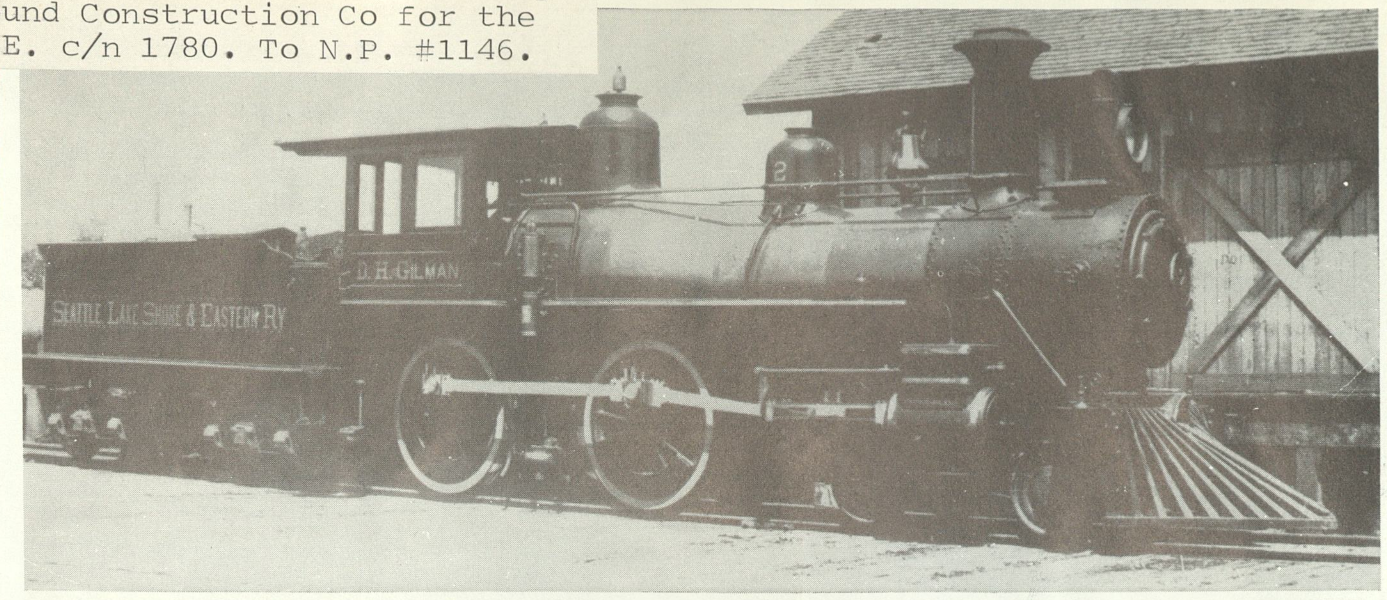
*Drawn from Photo by Albert Farrow, 138 10th St., So., Auburn, Wash.*



Who knows of another roofed outdoor turntable? This is located on the NP at Easton, Wash., a helper station in the Cascades

SELLER
DATE
FORM

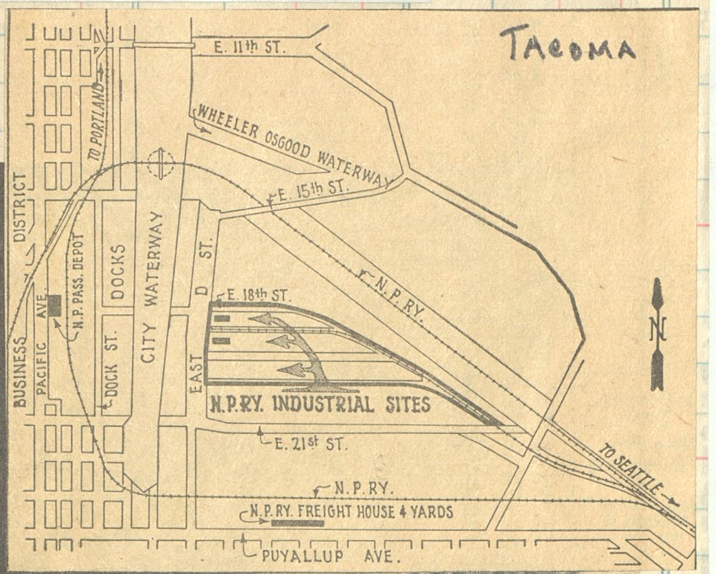
Ordered from Rhode Island in 1887 by Puget Sound Construction Co for the S.L.S.& E. c/n 1780. To N.P. #1146.


D. H. GILMAN
SEATTLE LAKE SHORE & EASTERN RY
2

**ON THE LAKE SHORE.** Engine No. 2, the "D. H. GILMAN," served the Seattle, Lake Shore & Eastern Railway. Road was completed from Lake Washington to Sumas, on Canadian border, in 1891, later passed under control of Northern Pacific. (Courtesy of University of Washington)

227
BLACK RIVER

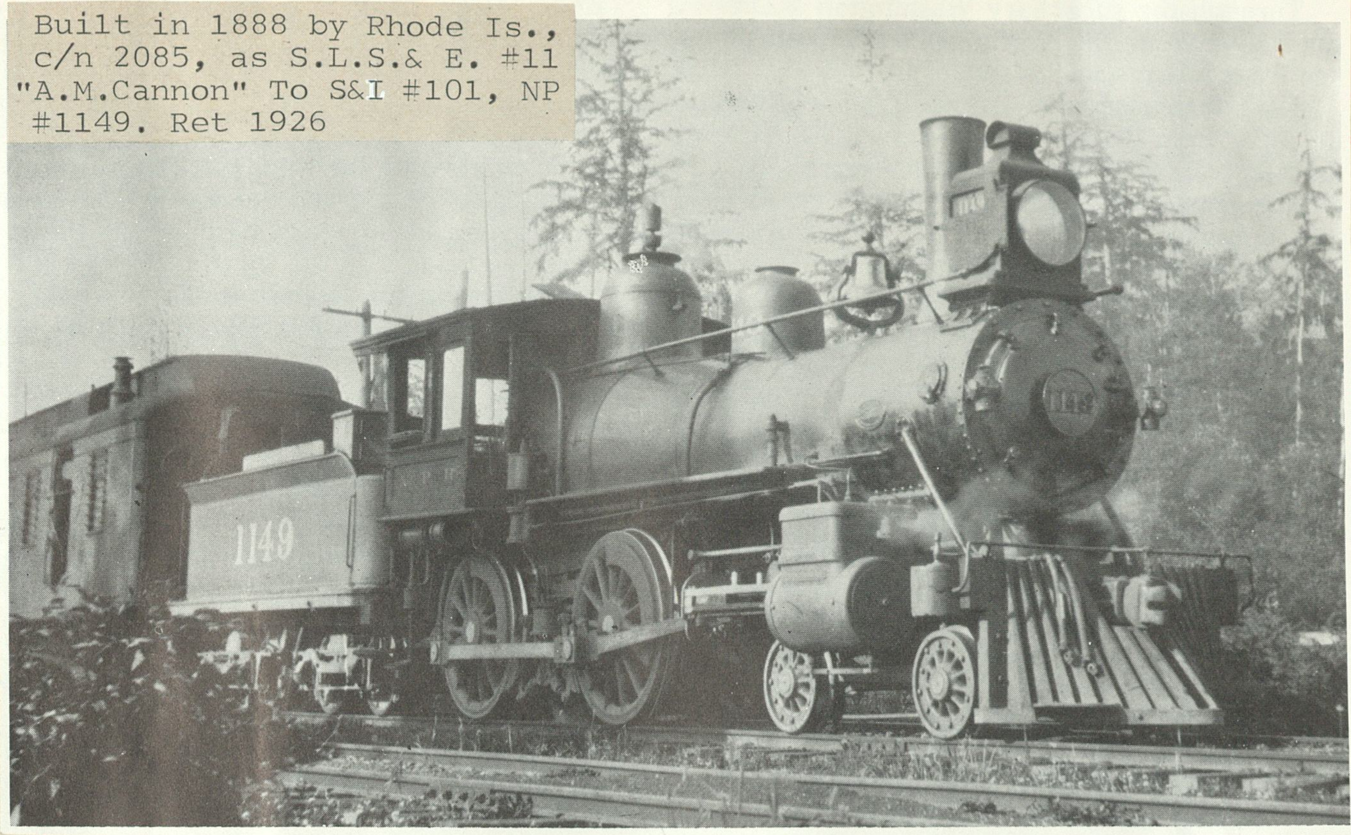
One of the old main line 10 wheelers, 227, zips by Black River with the Grays Harbor local


TACOMA
E. 11th ST.
TO PORTLAND
WHEELER OSGOOD WATERWAY
E. 15th ST.
BUSINESS DISTRICT
PACIFIC AVE.
N.P. PASS. DEPOT
DOCK ST.
DOCKS
CITY WATERWAY
EAST D ST.
E. 18th ST.
N.P.RY.
N.P.RY. INDUSTRIAL SITES
E. 21st ST.
TO SEATTLE
N.P.RY.
N.P.RY. FREIGHT HOUSE & YARDS
PUYALLUP AVE.
N

Clos. No.

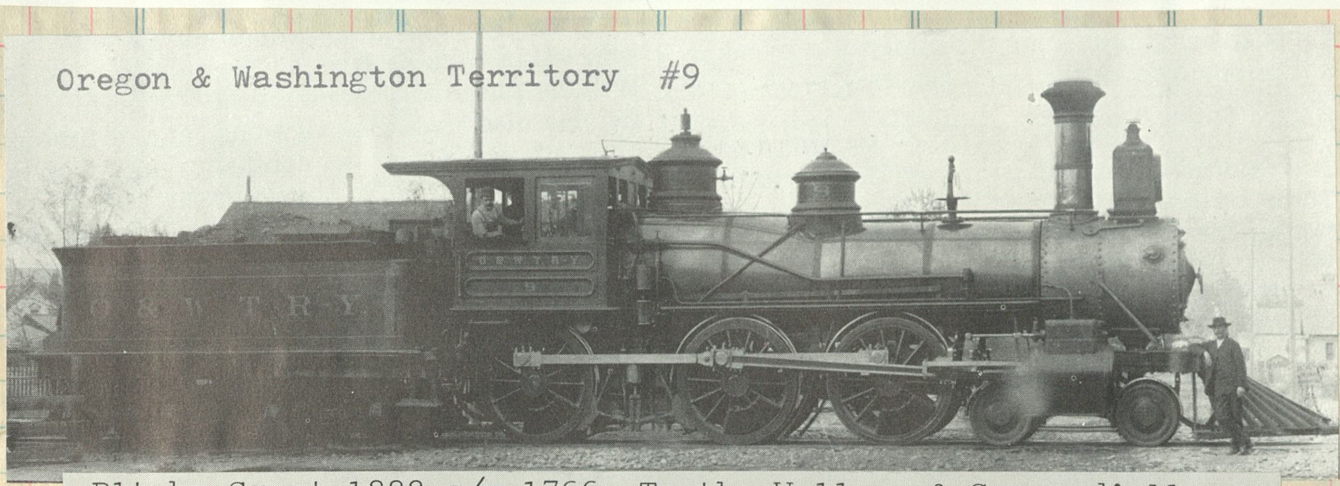
Amount

**NORTHERN PACIFIC'S 1149** was an American Standard formerly used on the Seattle, Lake Shore & Eastern Railway. The latter road acquired the Seattle & West Coast Railway in the late 1880's and both lines passed into control of the Northern Pacific in 1891. Note the headlight lens cover, hinged back against the side of the oil headlight housing. Engine was constructed by the Rhode Island Locomotive Works. (Courtesy of Fred Jukes)

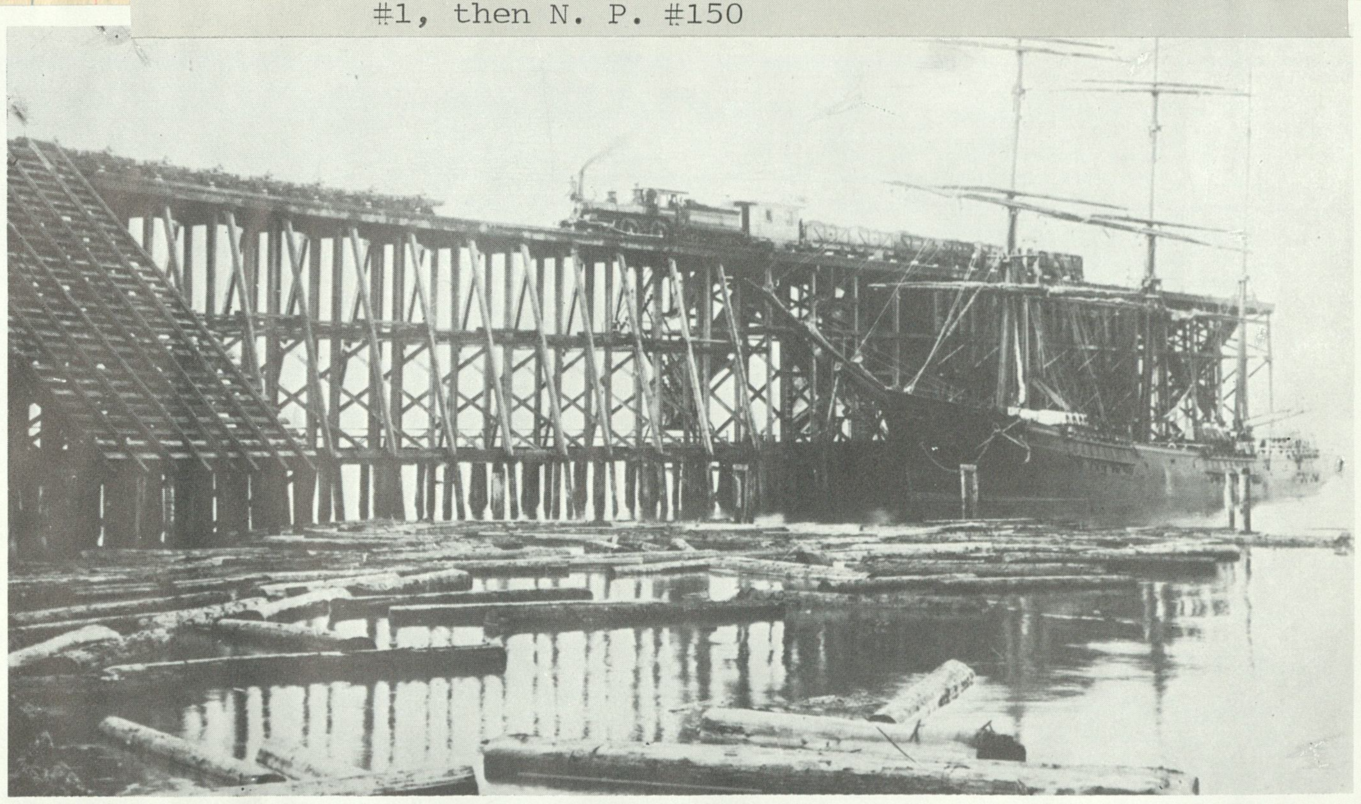


Built in 1888 by Rhode Is., c/n 2085, as S.L.S.& E. #11 "A.M.Cannon" To S&I #101, NP #1149. Ret 1926

Oregon & Washington Territory #9



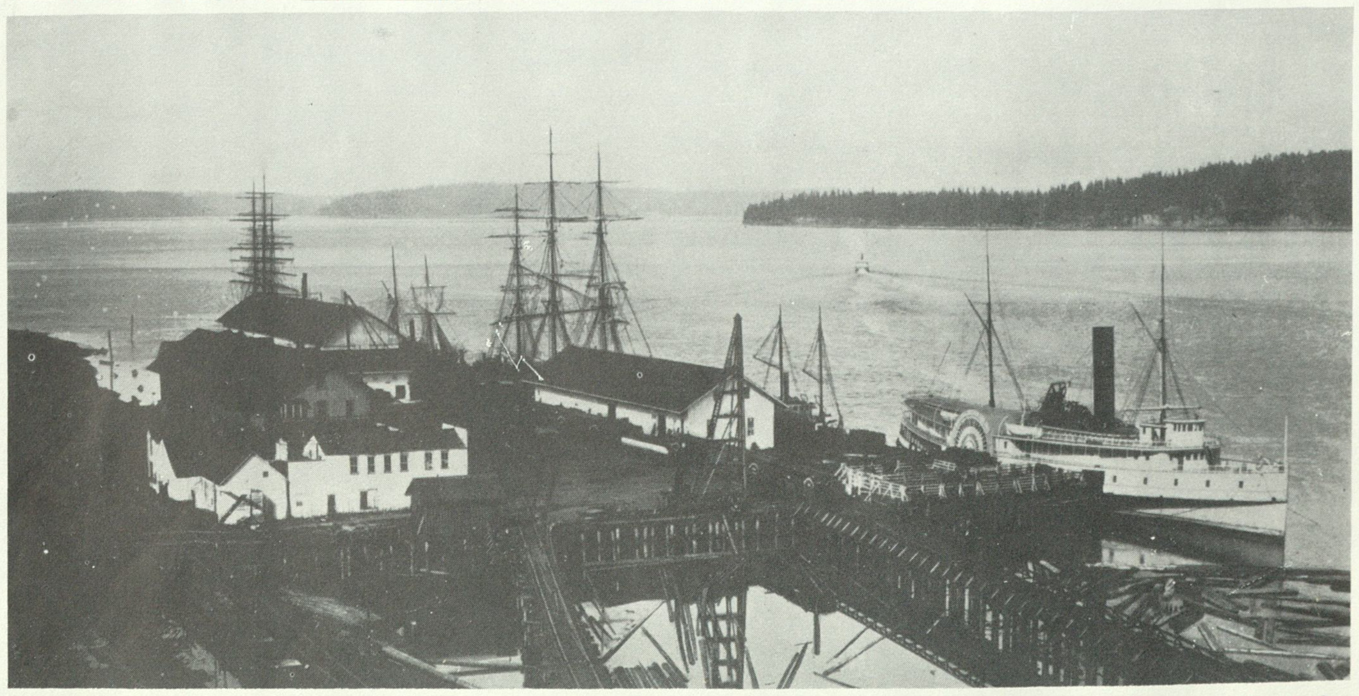
Blt by Grant 1888 c/n 1766 To the Wallace & Coeur d' Alene #1, then N. P. #150



**STEAM AND SAIL.** Tall-stacked 8-wheeler No. 1 of the old Bellingham Bay & Eastern Railroad spots coal "jimmies" for unloading at the bunkers on Bellingham Bay in 1892. At left can be seen empty "bunks" that have been unloaded at log dump, the logs floating in the boom in foreground. B.B.&E. hauled coal from Blue Canyon mine on Lake Whatcom, operating over part of the Fairhaven & New Whatcom street railway to reach this log dump and coal bunker. Road went into operation in 1892, extended to Wickersham in 1902, and was sold to the Northern Pacific in 1903. (Courtesy of Fred Jukes)

Northern Pacific 2-8-2 No. 1826, class W-3, hauling a local freight between Tacoma and Auburn, Wash., 1955.

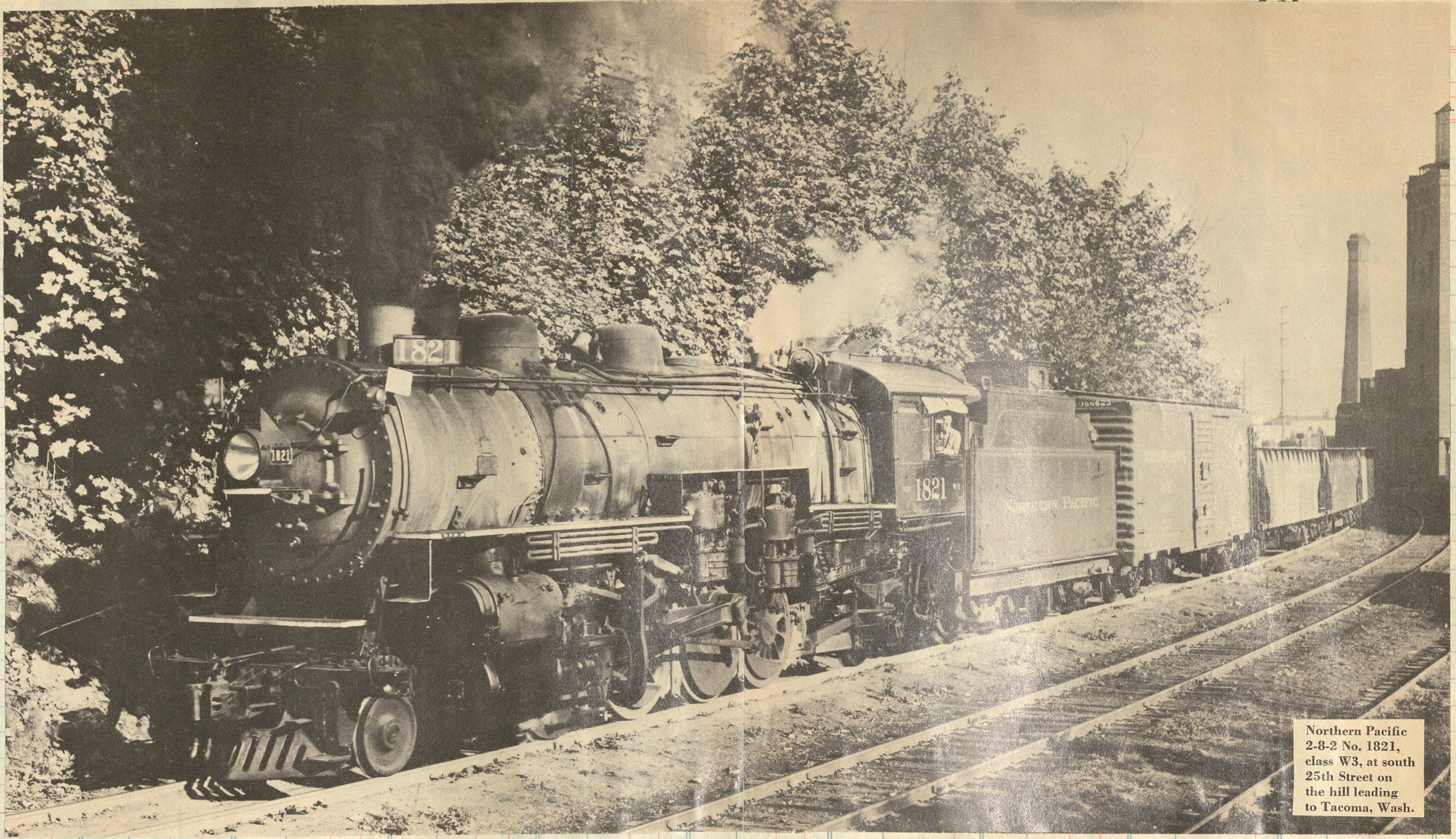
W. Wilkinson
4423 North 11th St.
Tacoma 6, Wash.



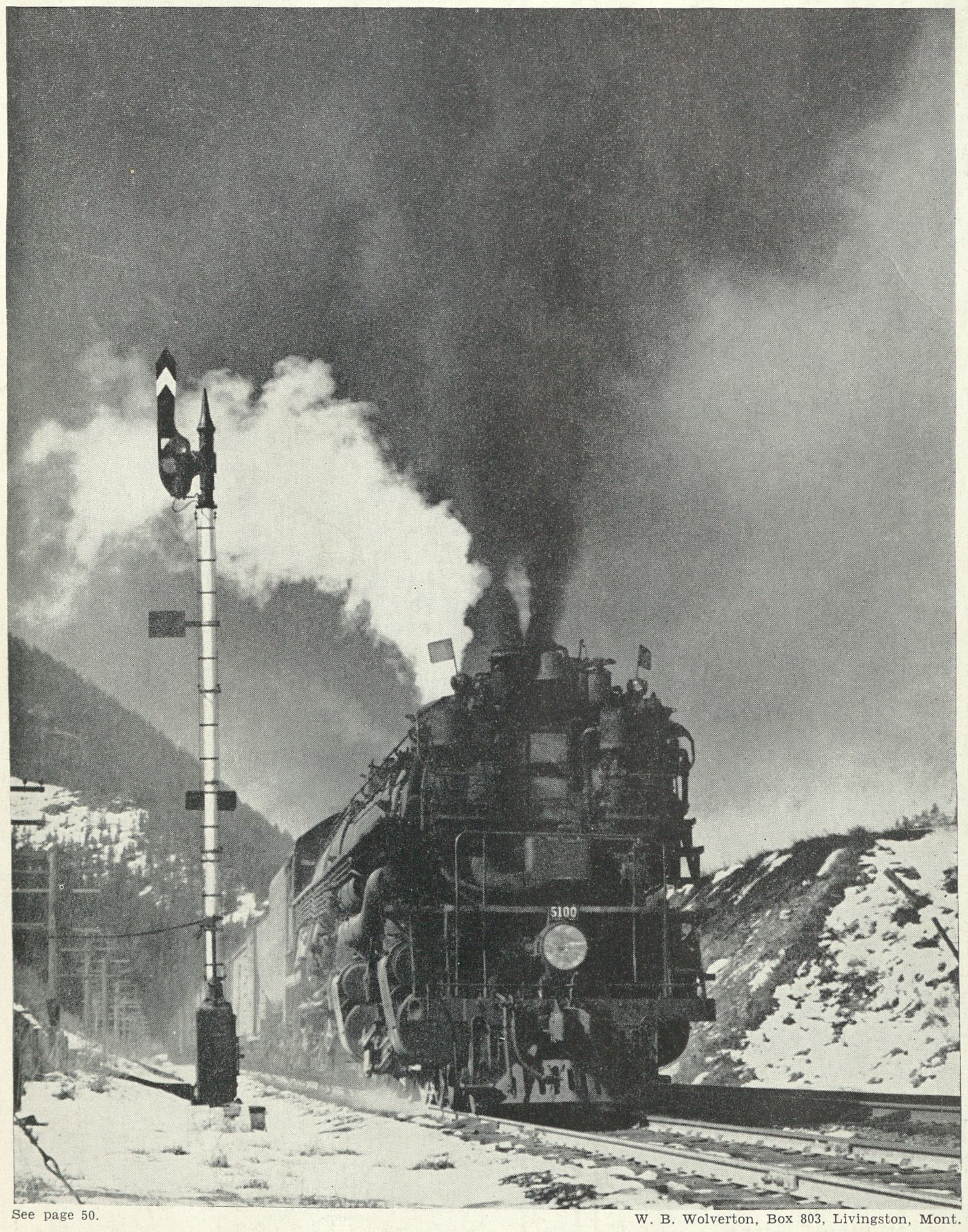
**PUGET SOUND TERMINUS** of the Northern Pacific at Tacoma, Washington, in 1884. Sailing ships and sidewheel steamboat met trains at this wharf. Note N.P. box cars and stock pens on deck. (Courtesy Northern Pacific Ry.)

Clos. No. Sold Amount Clos. No. So

No. Sold Amount



Northern Pacific 2-8-2 No. 1821, class W3, at south 25th Street on the hill leading to Tacoma, Wash.

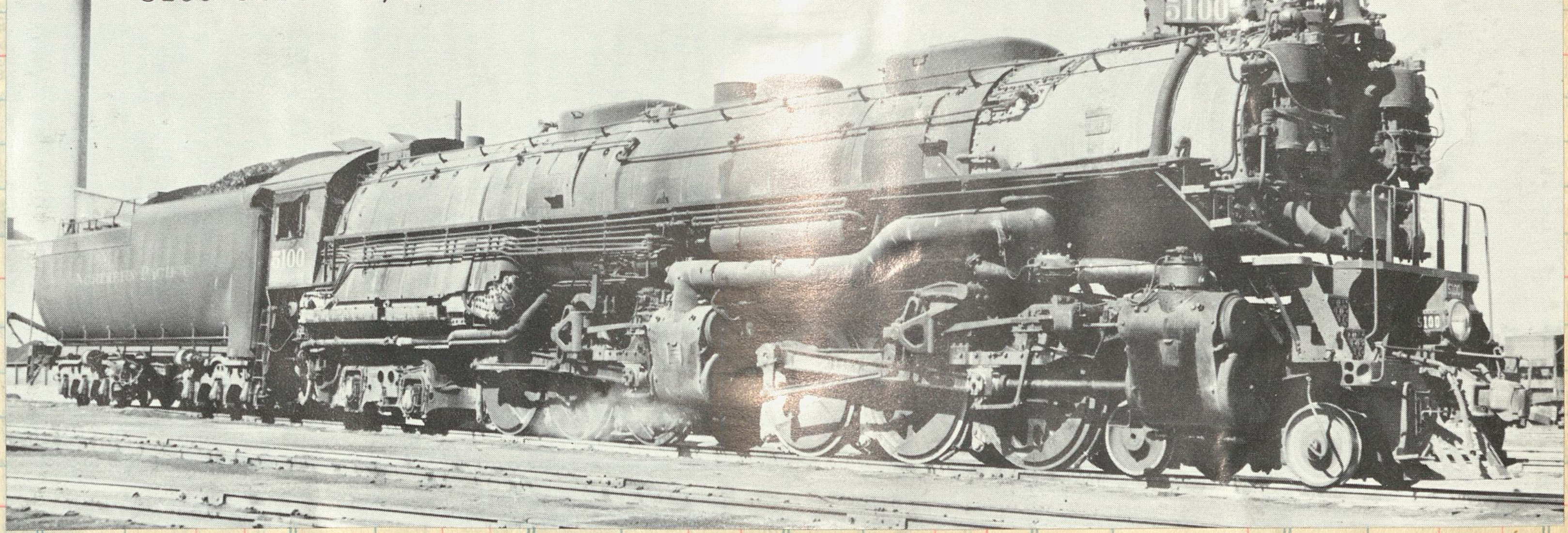


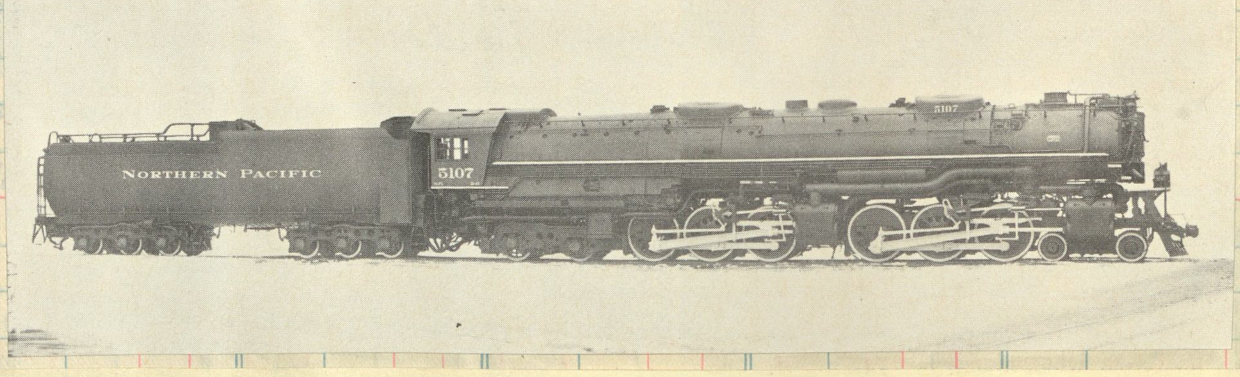
See page 50. W. B. Wolverton, Box 803, Livingston, Mont.

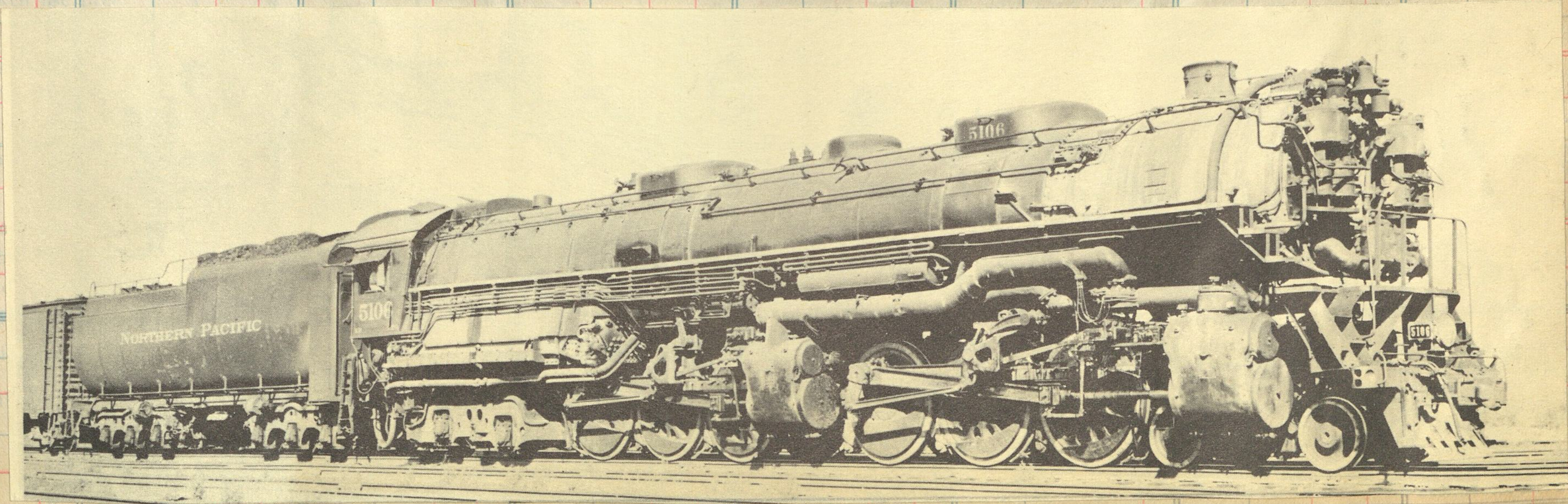
Extra 5100 climbing the hill about eight miles east of Bozeman, Montana with 4017 tons. The 5100 built by Alco 1936, class Z-6, clys (4) 23x32 dvs 69" and T F 104,500.

The Enpee's initial 4-6-6-4

5100-5111 c/n 68760 Alco 1936

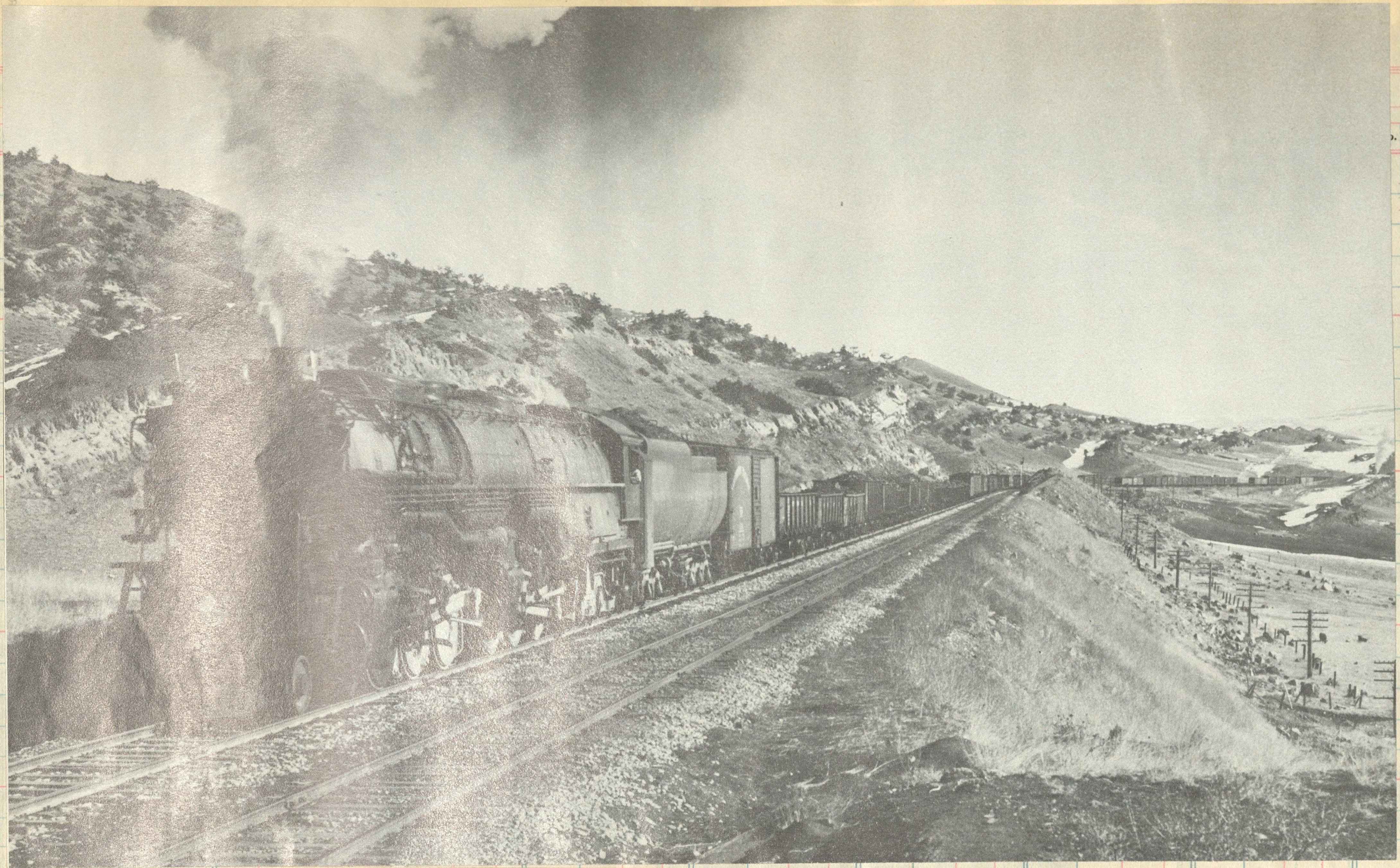




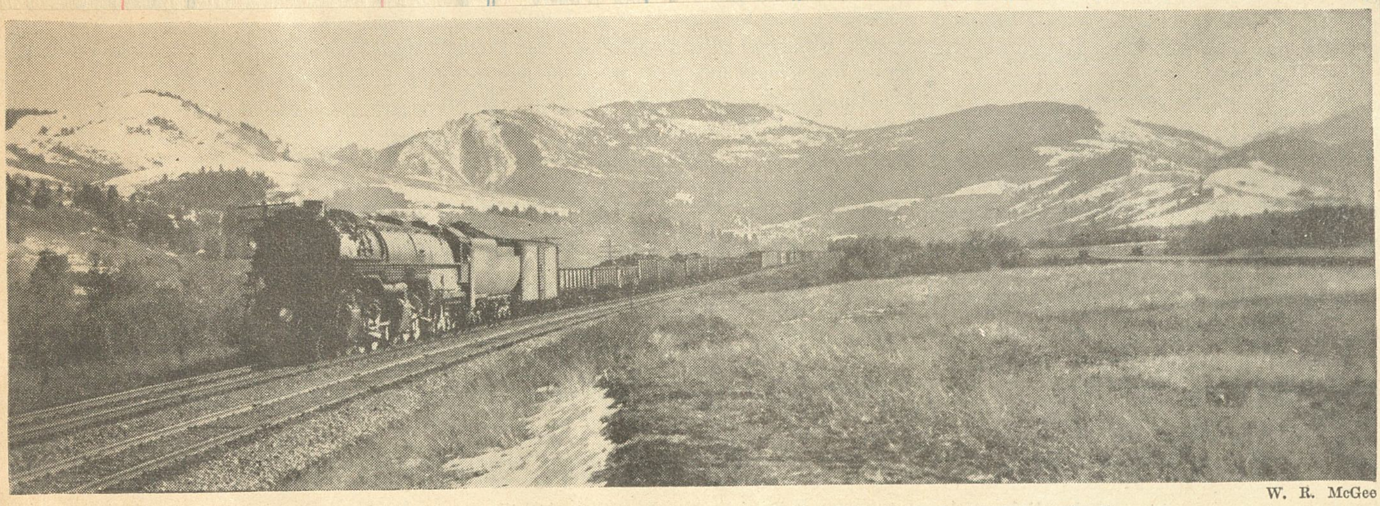


SELLER
DATE
FORM DESTINATION Amt.

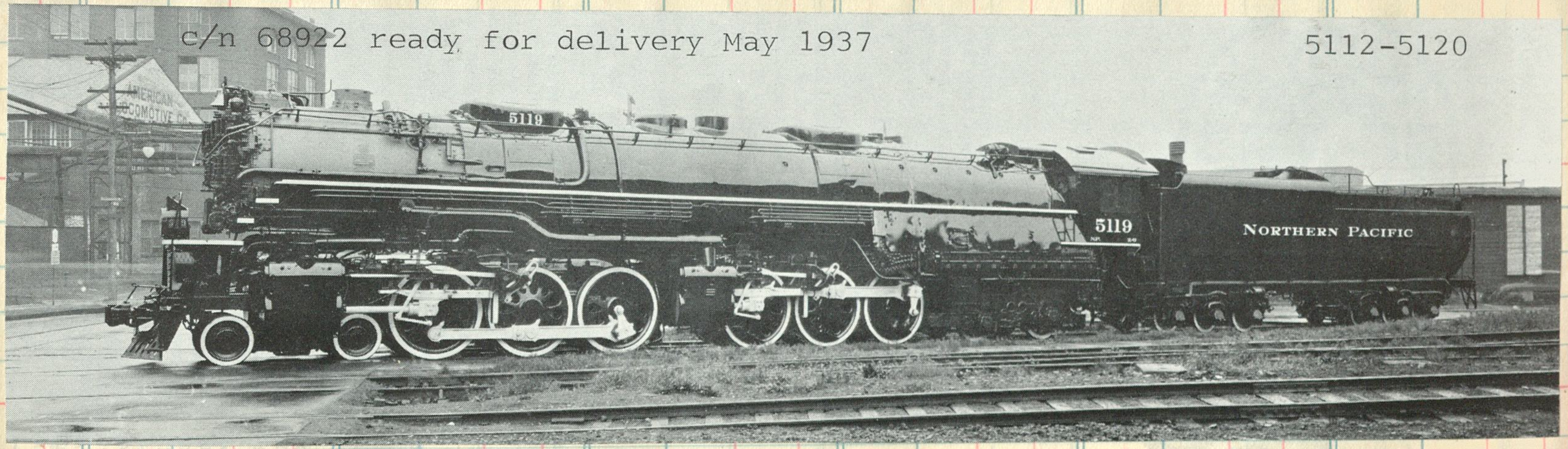
Sold Amount Clos. No. Sold Amount



Extra 5101 west works up the Bozeman hill with 16 loads and 57 mtys.
A Mike lends a hand leaning against the hack.

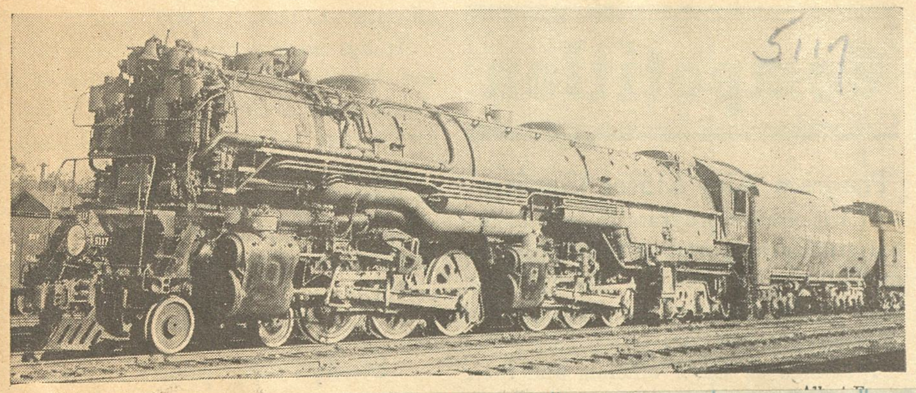

W. R. McGee

NORTHERN PACIFIC'S ENGINE 5101 JUST OUT OF BOZEMAN CANYON, MONT.

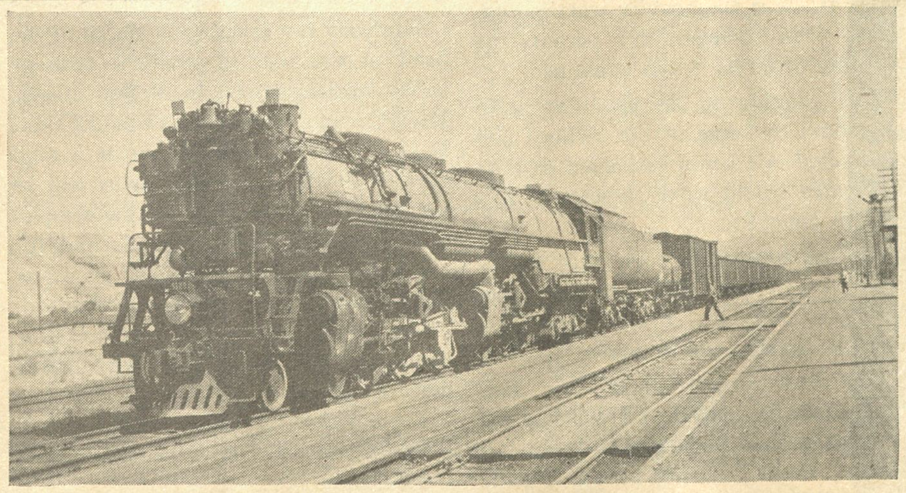


c/n 68922 ready for delivery May 1937

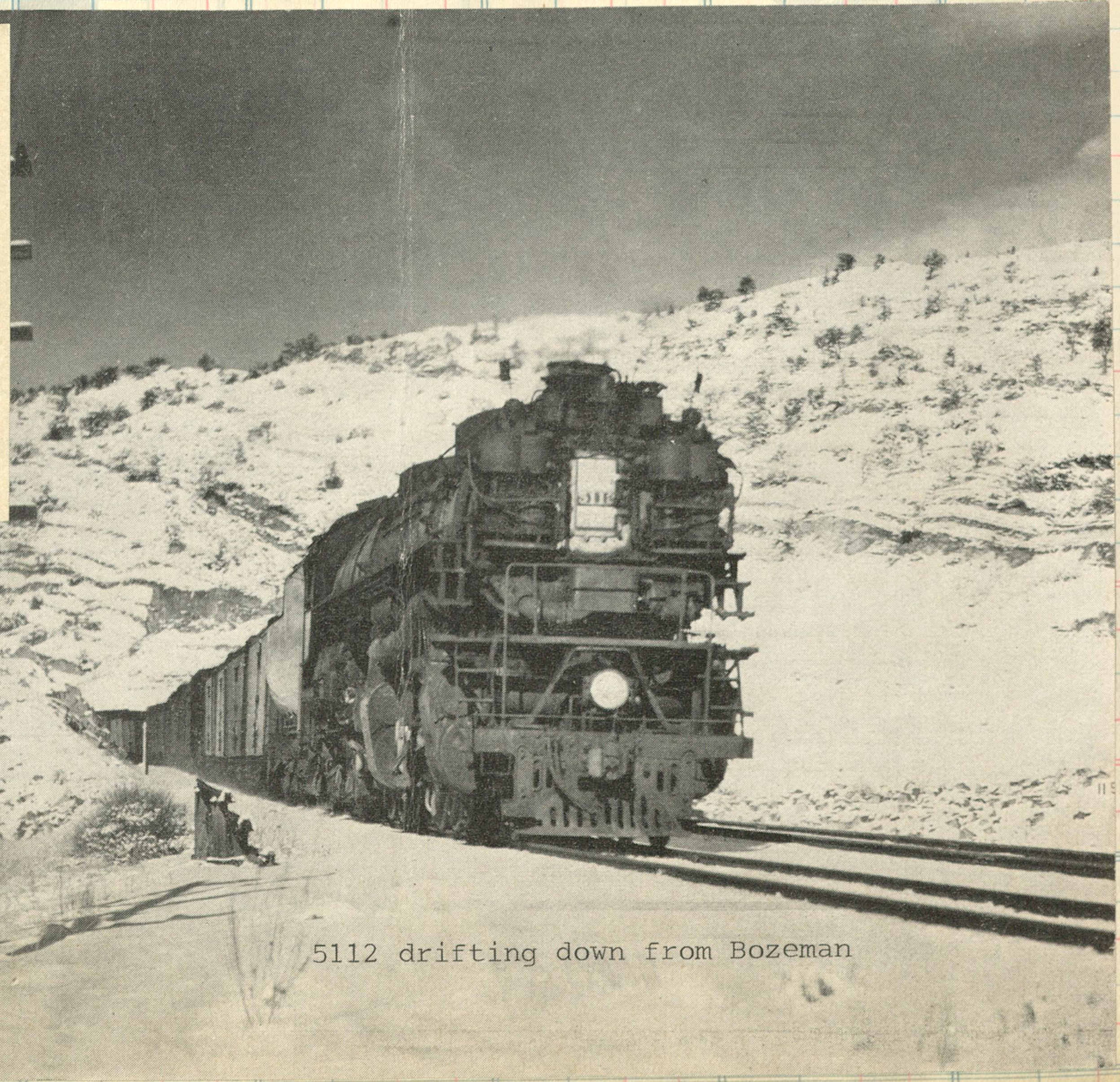
5112-5120



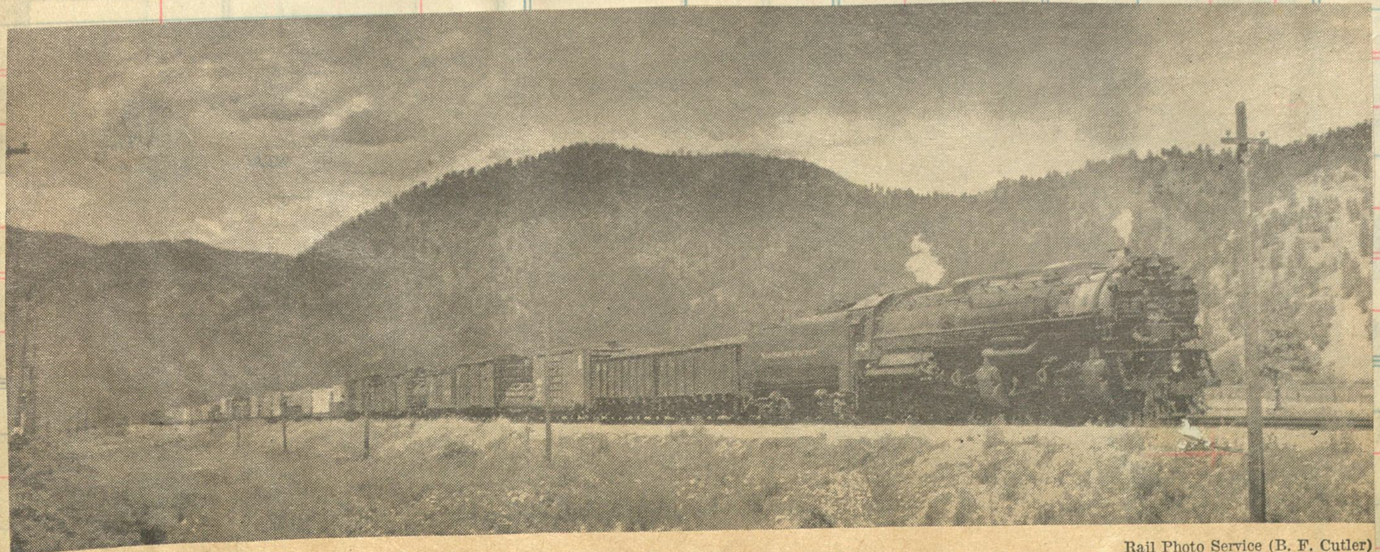
5117


W. R. McGee

NORTHERN PACIFIC'S LOCOMOTIVE 5120 AT BOZEMAN, MONT.

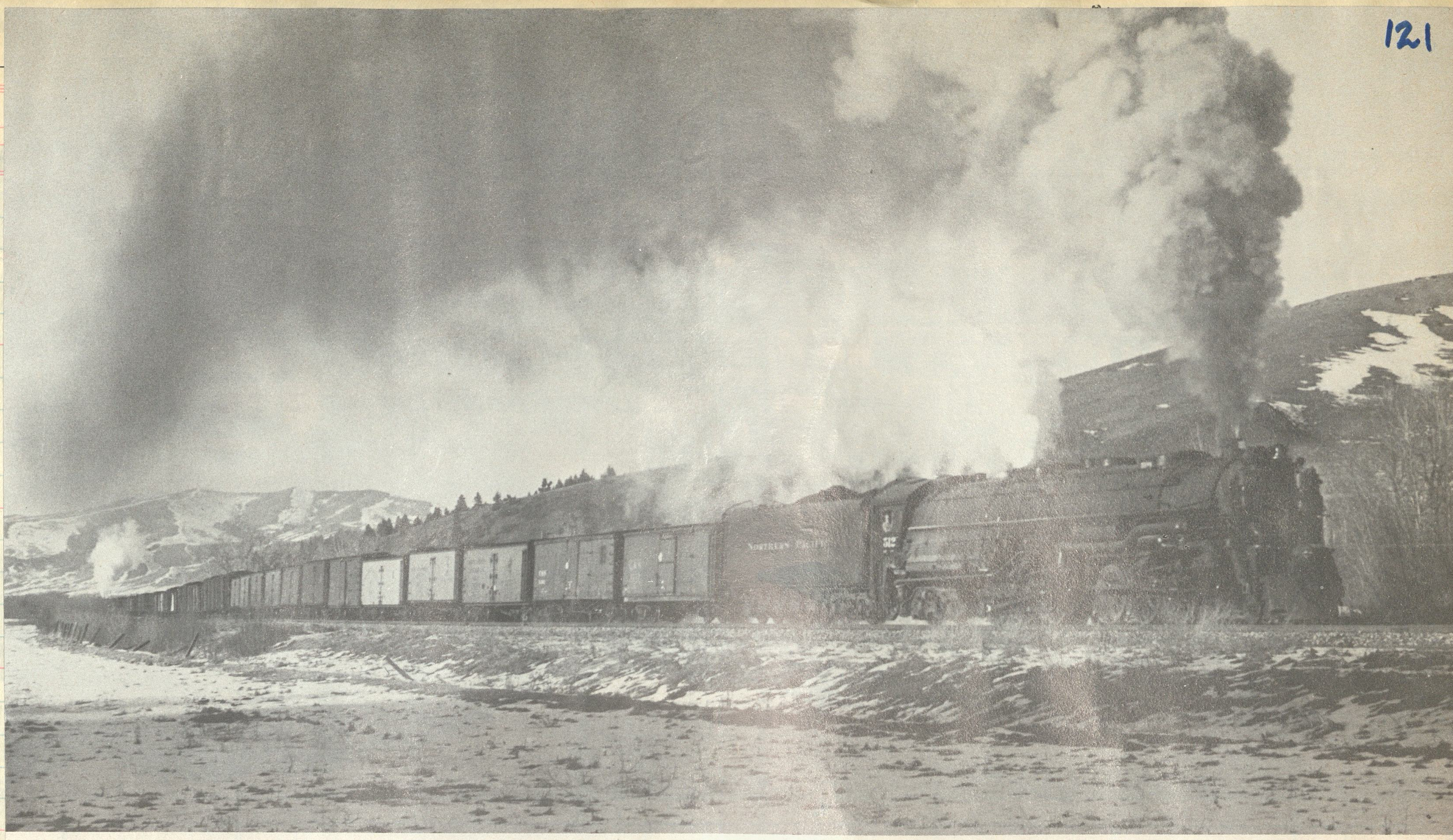


5112 drifting down from Bozeman

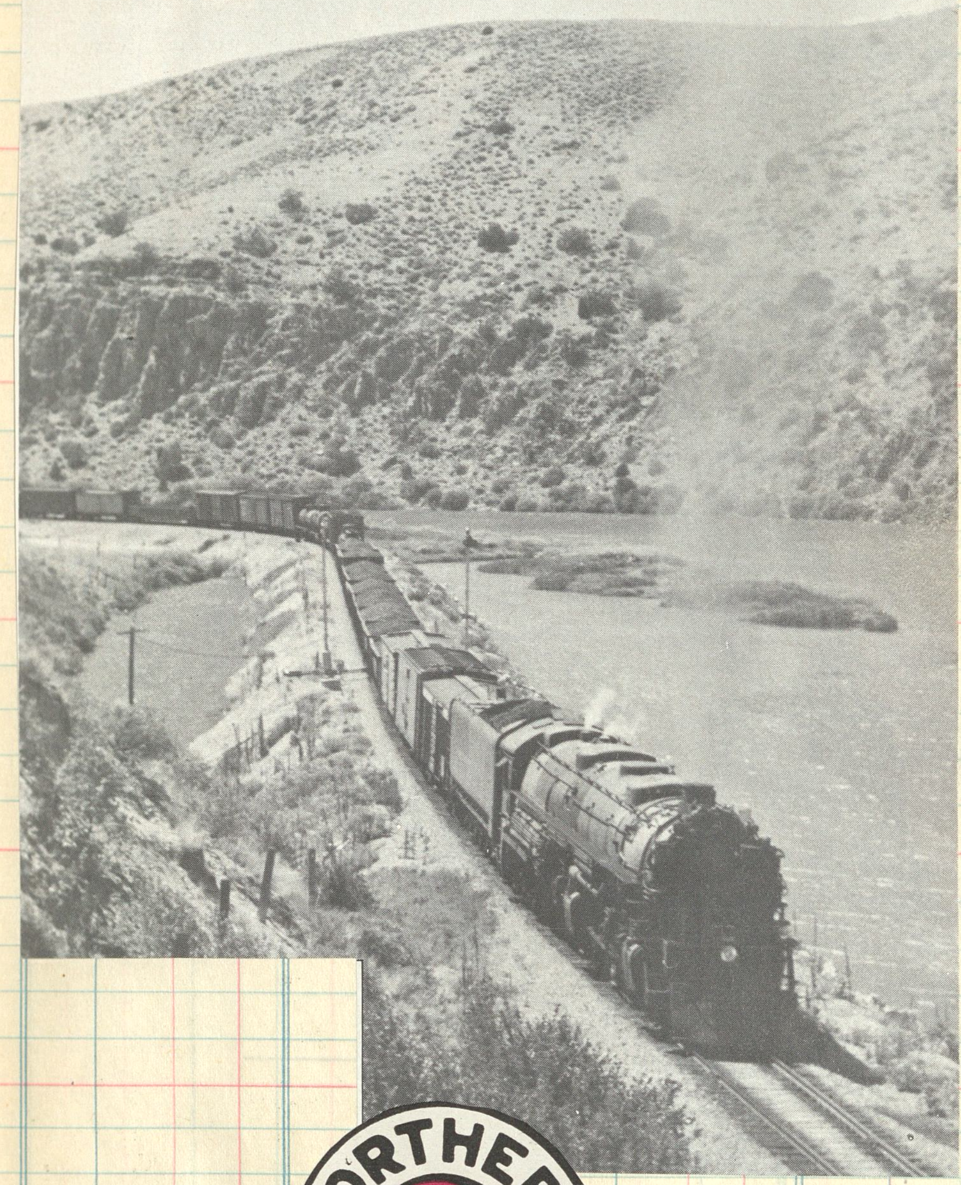

Rail Photo Service (B. F. Cutler)

NORTHERN PACIFIC RAILROAD'S ENGINE 5120 HAULING FREIGHT THROUGH BOZEMAN PASS, MONT. OKM

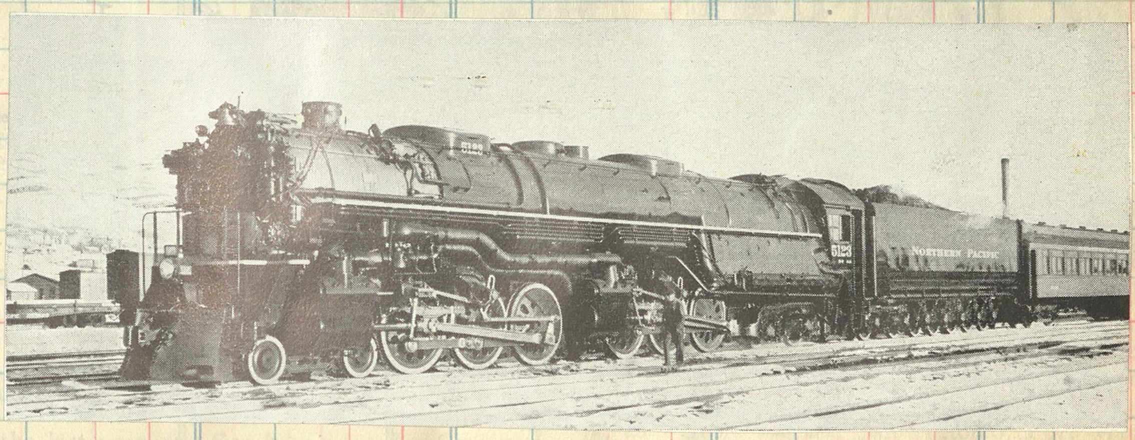
WARREN R. McGEE and the Northern Pacific are inseparable. Born in the NP shop city of Livingston, Mont., in 1914, Warren hired out with the railroad on July 11, 1936, and worked his way up to conductor. Except for 33 months in the South Pacific during World War II, he railroaded until retirement on October 31, 1975. (In the photo at left, that's Conductor McGee and his father, Engineer H. E. McGee, on their first trip together—on NP No. 4 on November 21, 1950.) Warren has loved railroading, on and off duty, and the evidence is in a collection of 18,000 black-and-white rail pictures, plus 6000 color slides and 600 color prints. Convinced of the appropriateness of an independent Northern Pacific, he co-founded the Livingston Anti-Merger Committee and fought creation of Burlington Northern up to the U.S. Supreme Court. After these wars, Warren remains as feisty as ever: "I ran for office twice but could never get enough votes, thank God . . . now they want me, and I won't."



THIS is Warren McGee's caption for negative 11061 depicting Northern Pacific Second 602—66 loads, 4 empties, 3656 tons—about to tackle the 1.9 per cent grade of Bozeman Pass on November 29, 1941: "Here we see the 5121, a brand-new Z-7 4-6-6-4, hitting the foot of the mountain grade and about to enter Rocky Canyon, with Malley 4503, a Z-4 2-8-8-2, pushing. The Z-7 was called a simple articulated by the builder, which deplored calling it a Malley. These 4-6-6-4's cost the NP 66 cents a mile to operate in those days. The newer Z-7's and Z-8's were favored by the enginemen over the prototype Z-6's of their wheel arrangement because they had 3000 more gallons of water, and water and coal would run out at the same time, which made a whale of a difference in shortening running times. The roadside parks on U.S. 10 were always filled when a steam train climbed through this canyon, and crewmen on these trains were always waving at a friendly public. Today people throw rocks—was it the featherbedding slurs by management that changed the public's attitude? I think so; I saw it happen. . . . Anyhow, those were the 'romantic' days of railroading and everyone put his shoulder to the wheel to get over the road. There was a spirit of professionalism in those days. No college punk could have much effect until he proved himself worthy; no plan was implemented until it was proven. I hope this comment is not indicative of a warped mind but of genuine concern—for the industry. No. 5121 cost $237,055.70 new, was cut up for scrap for $8511 in 1959 when she had only 7000 miles since a complete overhaul. . . ."

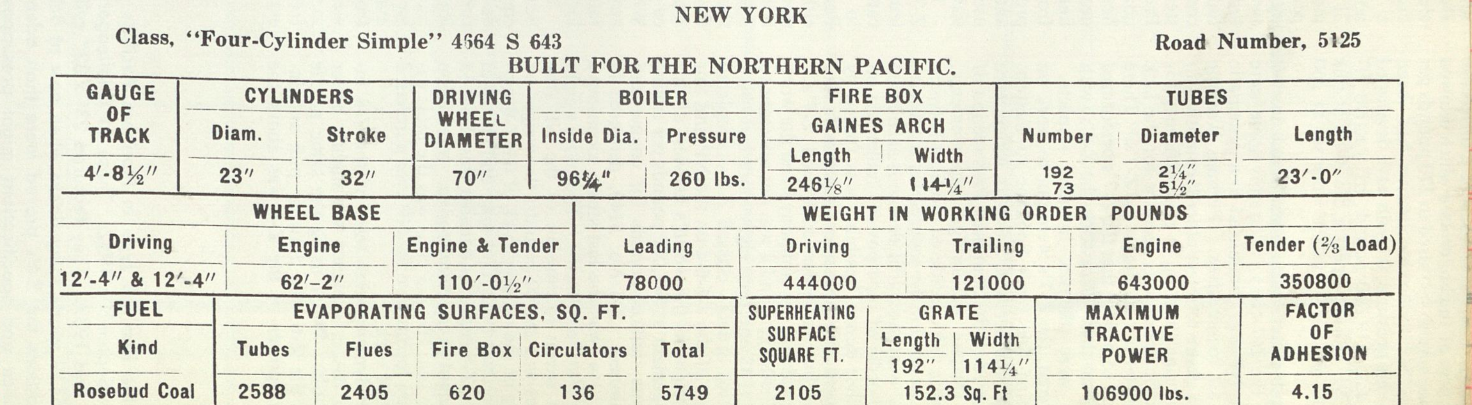


← says Warren McGee. Northern Pacific Extra 5126 West (44 loads, 0 empties, 2766 tons) is rolling along the Missouri River about 3 miles down the canyon from Lombard, Mont., where the freight had spent 2 hours in the siding meeting three trains. Counting on his partner, the rear brakeman, to walk forward in Lombard to inspect the train, then throw the switch to let the extra reenter the main, McGee walked down the canyon and climbed a hillside for a rare photo. Location of the 8-degree curve in the background is inaccessible, and few trains ran through the canyon during daylight



NORTHERN PACIFIC
YELLOWSTONE PARK LINE

5121-5126 c/n 69544 Alco 1941



## AMERICAN LOCOMOTIVE COMPANY
NEW YORK

Class, "Four-Cylinder Simple" 4664 S 643 Road Number, 5125

BUILT FOR THE NORTHERN PACIFIC.

| GAUGE OF TRACK | CYLINDERS | | DRIVING WHEEL DIAMETER | BOILER | | FIRE BOX GAINES ARCH | | TUBES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Diam. | Stroke | | Inside Dia. | Pressure | Length | Width | Number | Diameter | Length |
| 4′-8½″ | 23″ | 32″ | 70″ | 96¼″ | 260 lbs. | 246⅛″ | 114¼″ | 192<br>73 | 2¼″<br>5½″ | 23′-0″ |

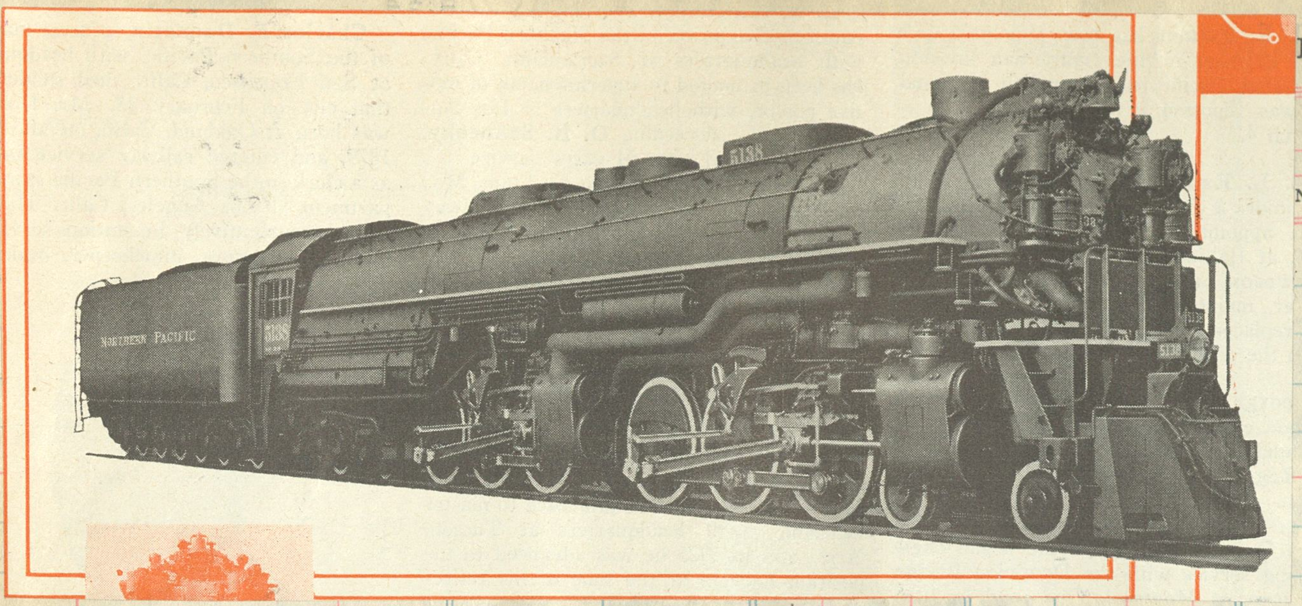
| WHEEL BASE | | | WEIGHT IN WORKING ORDER POUNDS | | | | |
|---|---|---|---|---|---|---|---|
| Driving | Engine | Engine & Tender | Leading | Driving | Trailing | Engine | Tender (⅔ Load) |
| 12′-4″ & 12′-4″ | 62′-2″ | 110′-0½″ | 78000 | 444000 | 121000 | 643000 | 350800 |

| FUEL | EVAPORATING SURFACES, SQ. FT. | | | | | SUPERHEATING SURFACE SQUARE FT. | GRATE | | MAXIMUM TRACTIVE POWER | FACTOR OF ADHESION |
|---|---|---|---|---|---|---|---|---|---|---|
| Kind | Tubes | Flues | Fire Box | Circulators | Total | | Length | Width | | |
| | | | | | | | 192″ | 114¼″ | | |
| Rosebud Coal | 2588 | 2405 | 620 | 136 | 5749 | 2105 | 152.3 Sq. Ft | | 106900 lbs. | 4.15 |

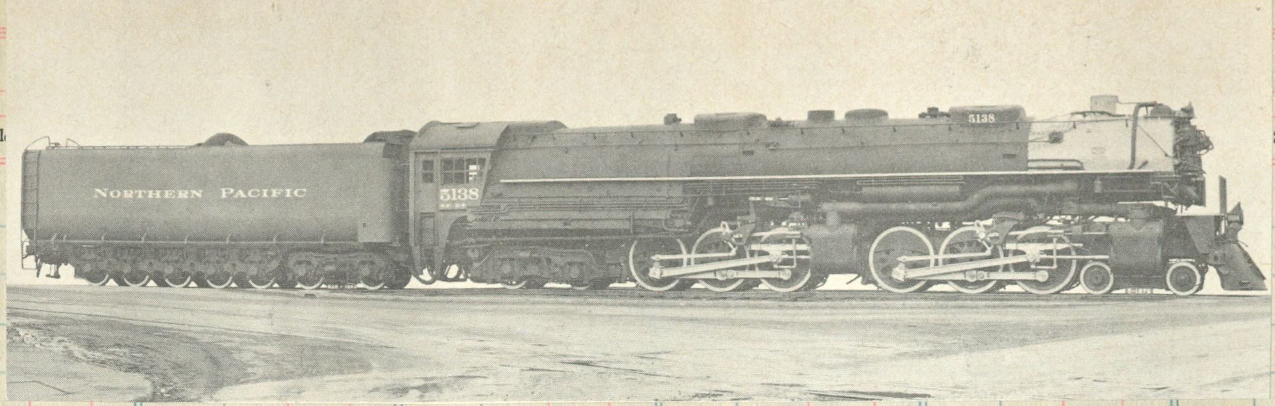
Tender Type -14 Wheeled Capacity, Water, 25000 Gals Fuel, 27 Tons

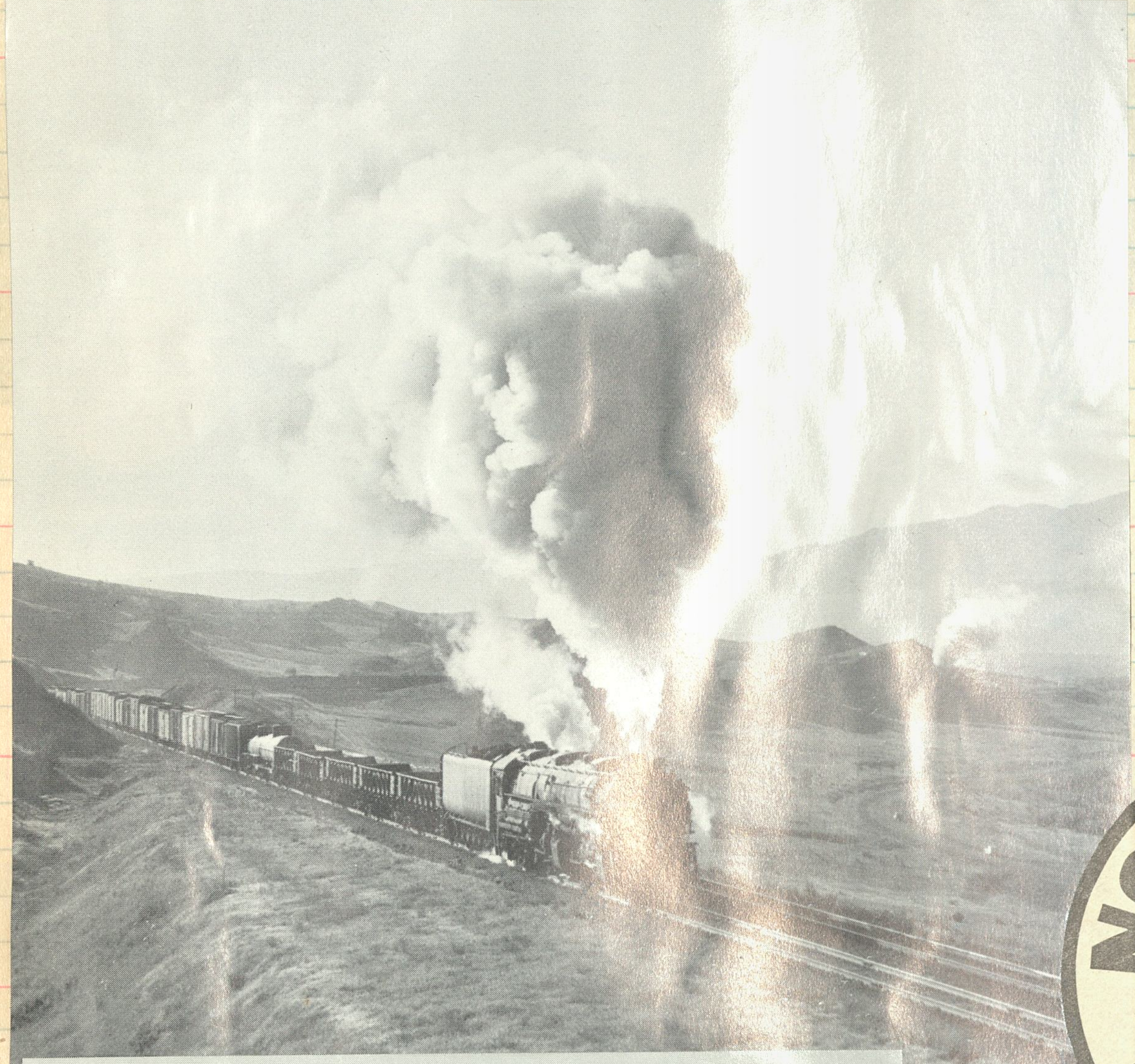
ORDER No. S-1842

December, 1941

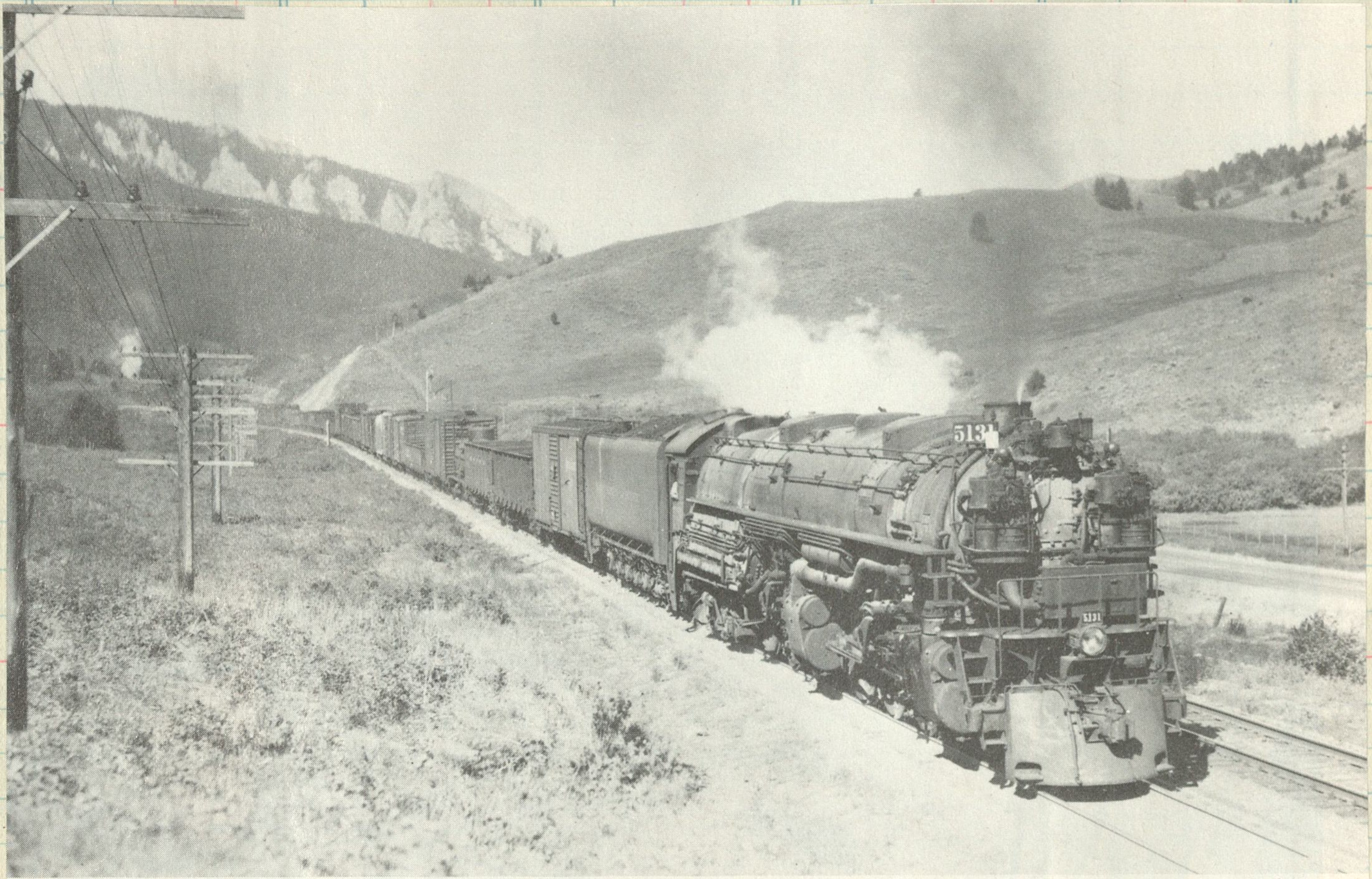


5130-5141 c/n 70151 Alco 1943


NORTHERN PACIFIC
5138



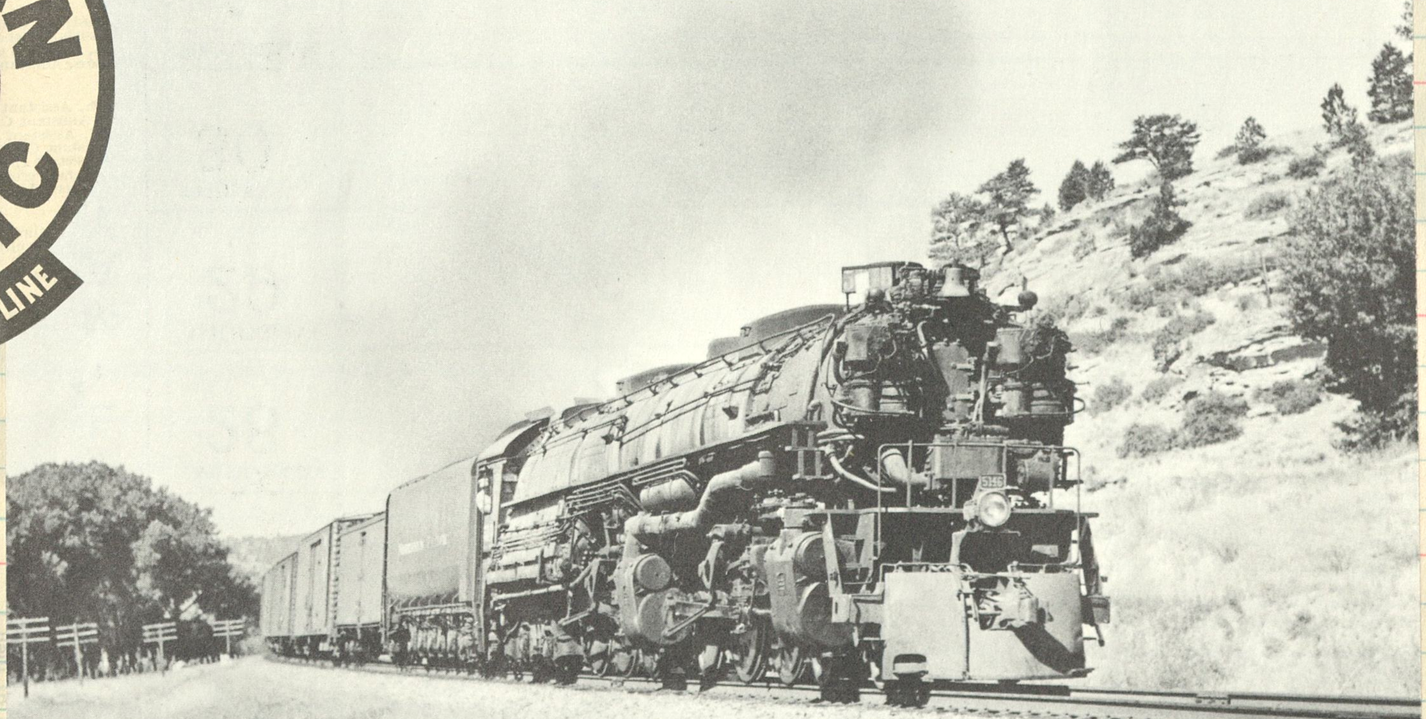
West of Livingston the 5136 leads tonnage up the east side of Bozeman Pass with the 5003 shoving against the caboose.

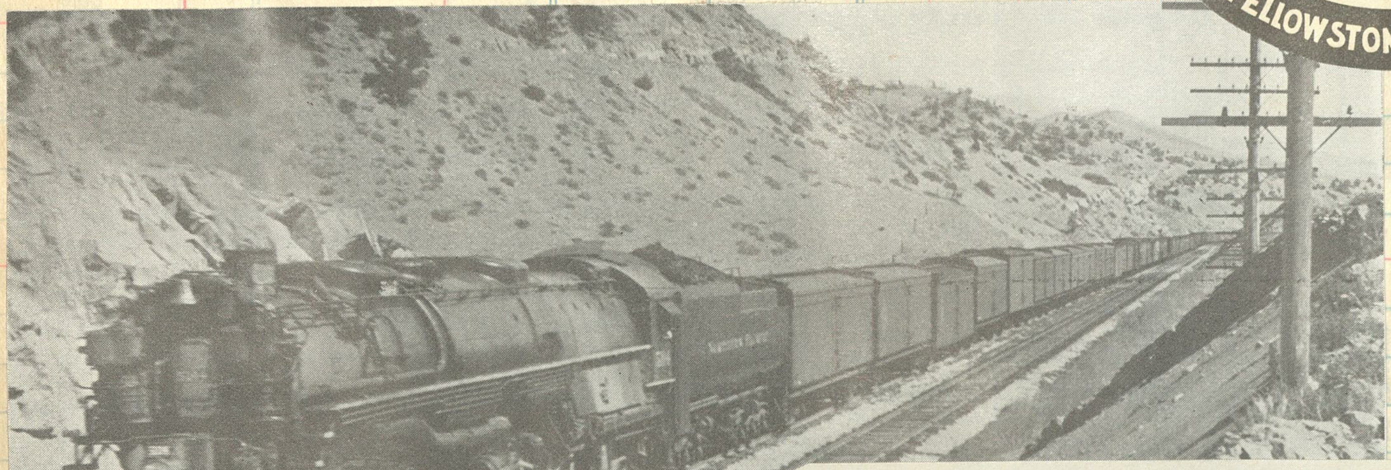


The 5131 hammers westbound above Chestnut with 2-8-8-4 #5004 pushing

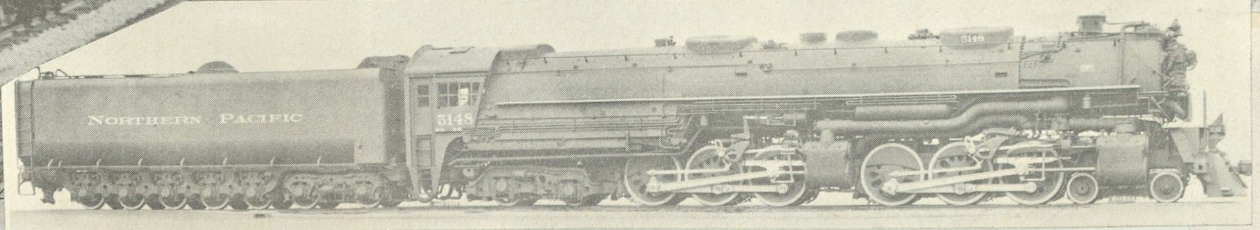
NORTHERN PACIFIC
YELLOWSTONE PARK LINE

The 5146 with an extra near Park City, Mont.



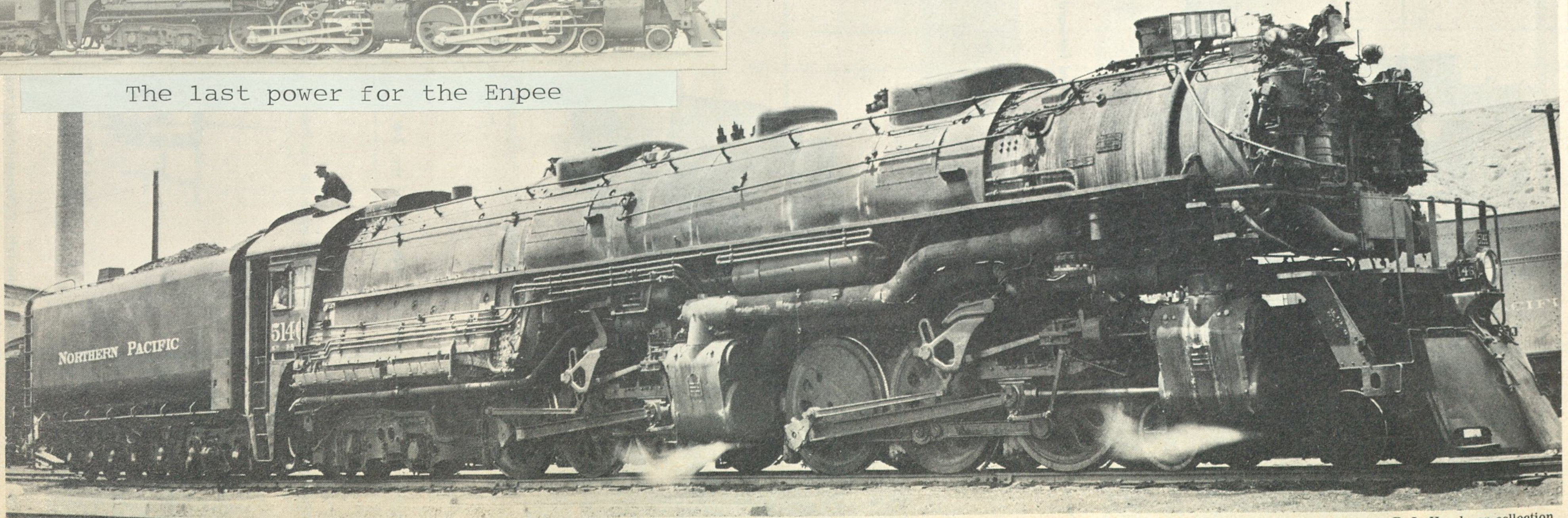


5144

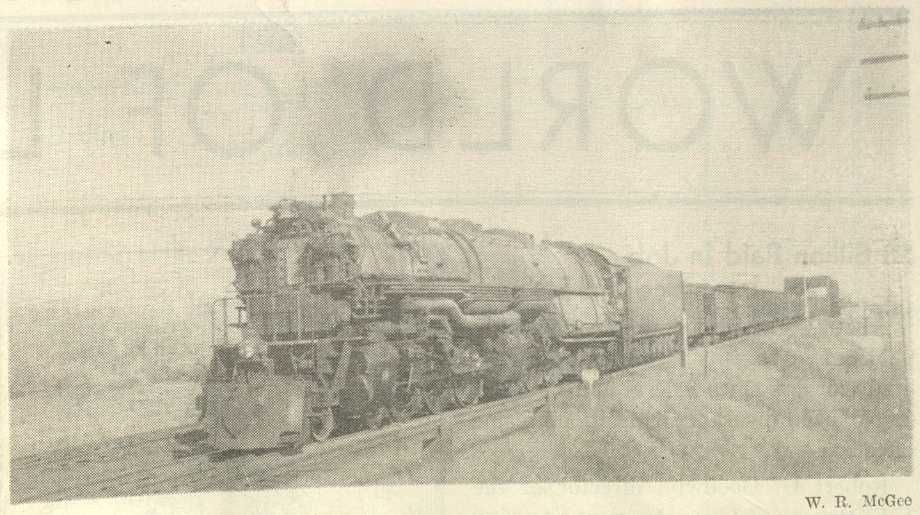

NORTHERN PACIFIC
5148

The last power for the Enpee

Eight, 5142-5149, delivered by Alco in 1944


NORTHERN PACIFIC
5146

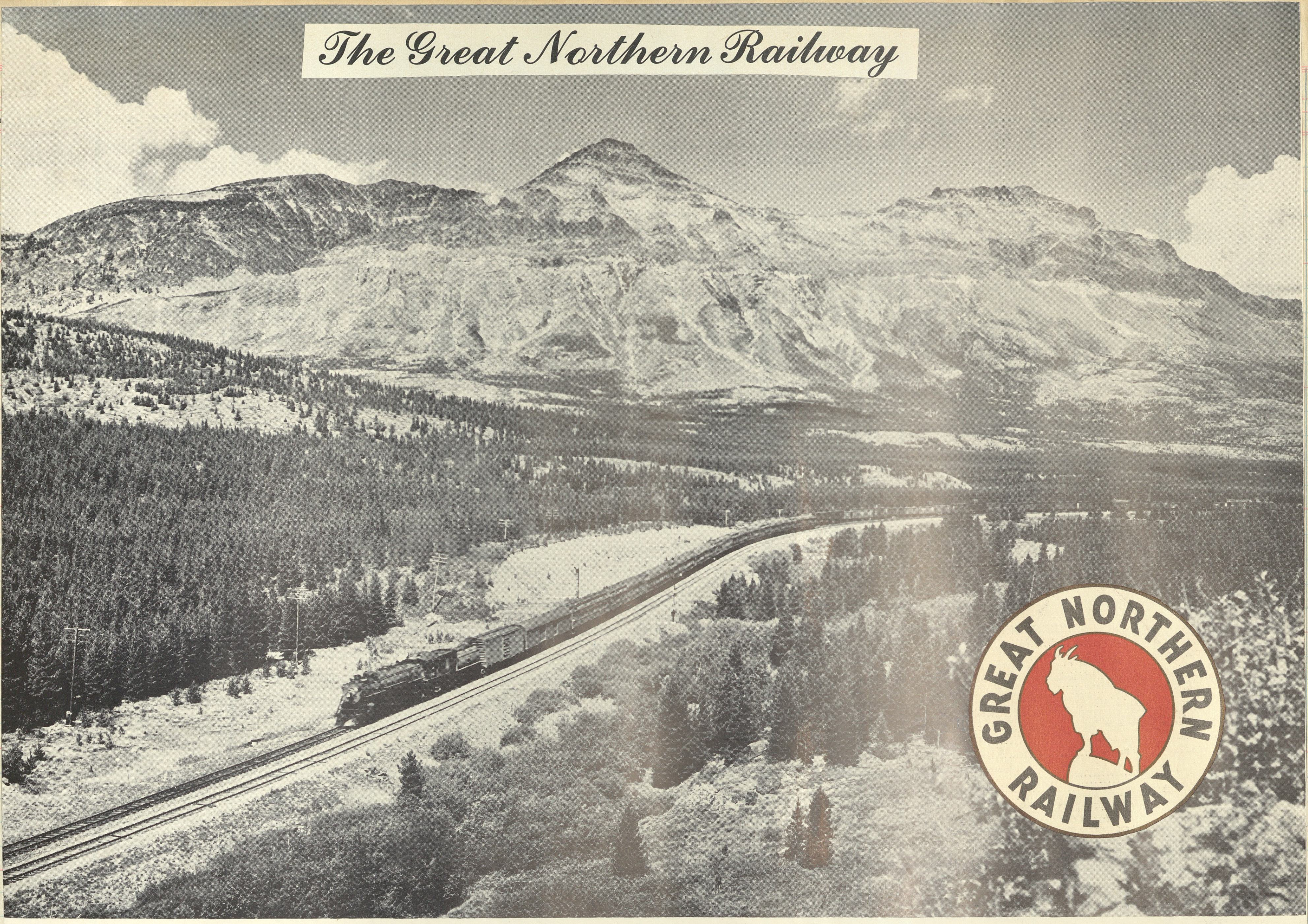
R. L. Hundman collection



W. R. McGee

NORTHERN PACIFIC'S ENGINE 5148 NEAR LIVINGSTON, MONT.

# *The Great Northern Railway*


GREAT NORTHERN RAILWAY

The route of the Empire Builder in Glacier National Park. Great Northern photo.

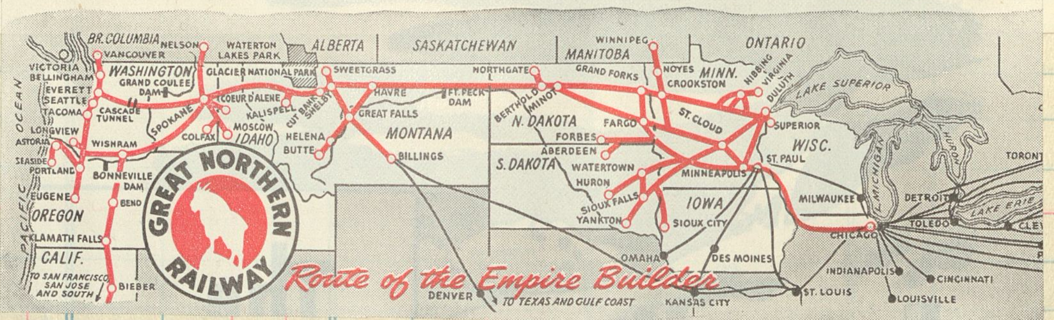
**GREAT NORTHERN IS THE LOW LEVEL ROUTE BETWEEN THE GREAT LAKES AND THE PACIFIC**

## THE EMPIRE BUILDER

is powered by super oil-burning and electric locomotives over the entire distance between St. Paul, Minneapolis and Seattle.

## GREAT NORTHERN RAILWAY

### BETWEEN GREAT LAKES AND PACIFIC

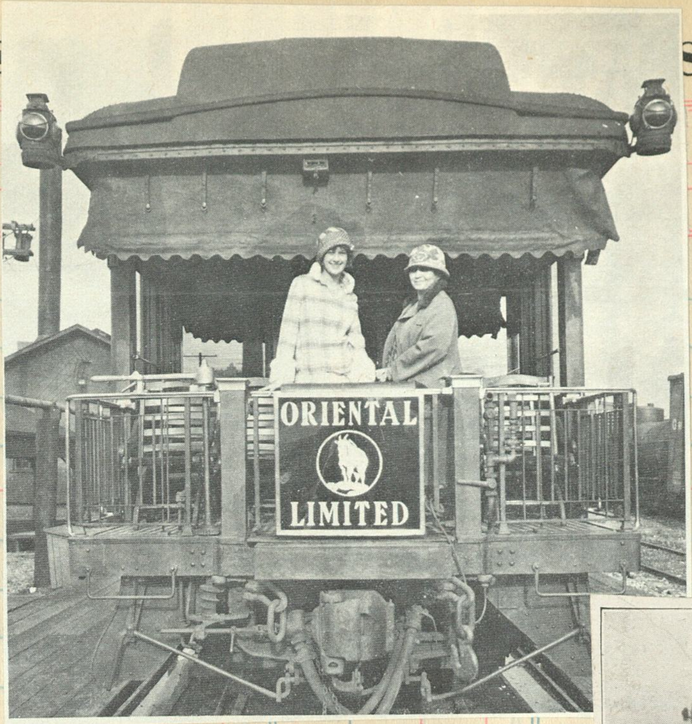

BR. COLUMBIA
NELSON
VANCOUVER
VICTORIA
BELLINGHAM
EVERETT
SEATTLE
TACOMA
WASHINGTON
GRAND COULEE DAM
CASCADE TUNNEL
SPOKANE
LONGVIEW
ASTORIA
SEASIDE
PORTLAND
WISHRAM
BONNEVILLE DAM
EUGENE
OREGON
BEND
KLAMATH FALLS
CALIF.
TO SAN FRANCISCO SAN JOSE AND SOUTH
BIEBER
PACIFIC OCEAN
WATERTON LAKES PARK
GLACIER NATIONAL PARK
COEUR D'ALENE
KALISPELL
COLFAX
MOSCOW
IDAHO
ALBERTA
SWEETGRASS
CUT BANK
SHELBY
HAVRE
GREAT FALLS
HELENA
BUTTE
BILLINGS
MONTANA
FT. PECK DAM
SASKATCHEWAN
MANITOBA
WINNIPEG
NORTHGATE
BERTHOLD
MINOT
N. DAKOTA
GRAND FORKS
FARGO
FORBES
ABERDEEN
S. DAKOTA
WATERTOWN
HURON
SIOUX FALLS
YANKTON
SIOUX CITY
IOWA
OMAHA
DES MOINES
DENVER
TO TEXAS AND GULF COAST
KANSAS CITY
ST. LOUIS
ONTARIO
NOYES
CROOKSTON
MINN.
HIBBING
VIRGINIA
DULUTH
ST. CLOUD
SUPERIOR
MINNEAPOLIS
ST. PAUL
WISC.
LAKE SUPERIOR
L. MICHIGAN
HURON
MILWAUKEE
CHICAGO
DETROIT
TOLEDO
LAKE ERIE
INDIANAPOLIS
CINCINNATI
LOUISVILLE
GREAT NORTHERN RAILWAY
Route of the Empire Builder

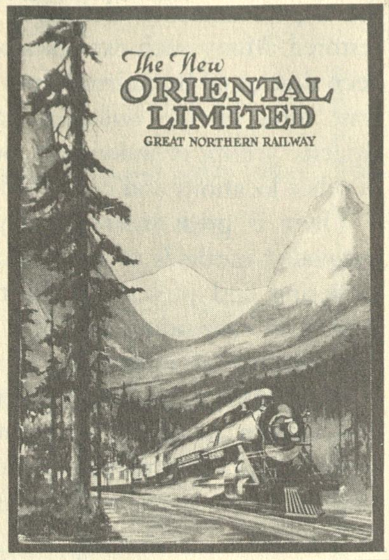
Mount Rockwell and Two Medicine Lake, Glacier National Park Region.

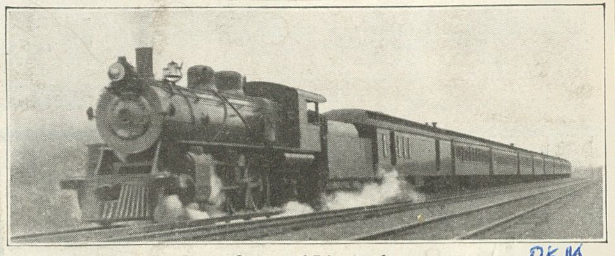
Mt. Rockwell from Two Medicine Chalet in Glacier Park. Great Northern Ry.

In 1927 the G.N. was operating 8,164 miles using 1,296 steam and 7 electric engines, 1,012 passenger and 49,170 freight cars

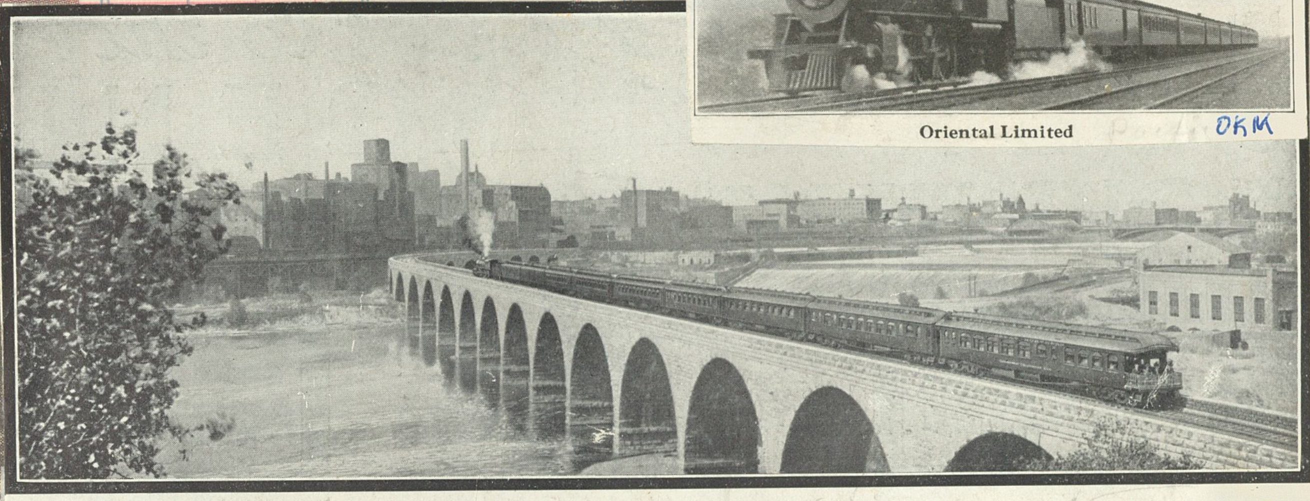
On the main line at Crary, N.D.





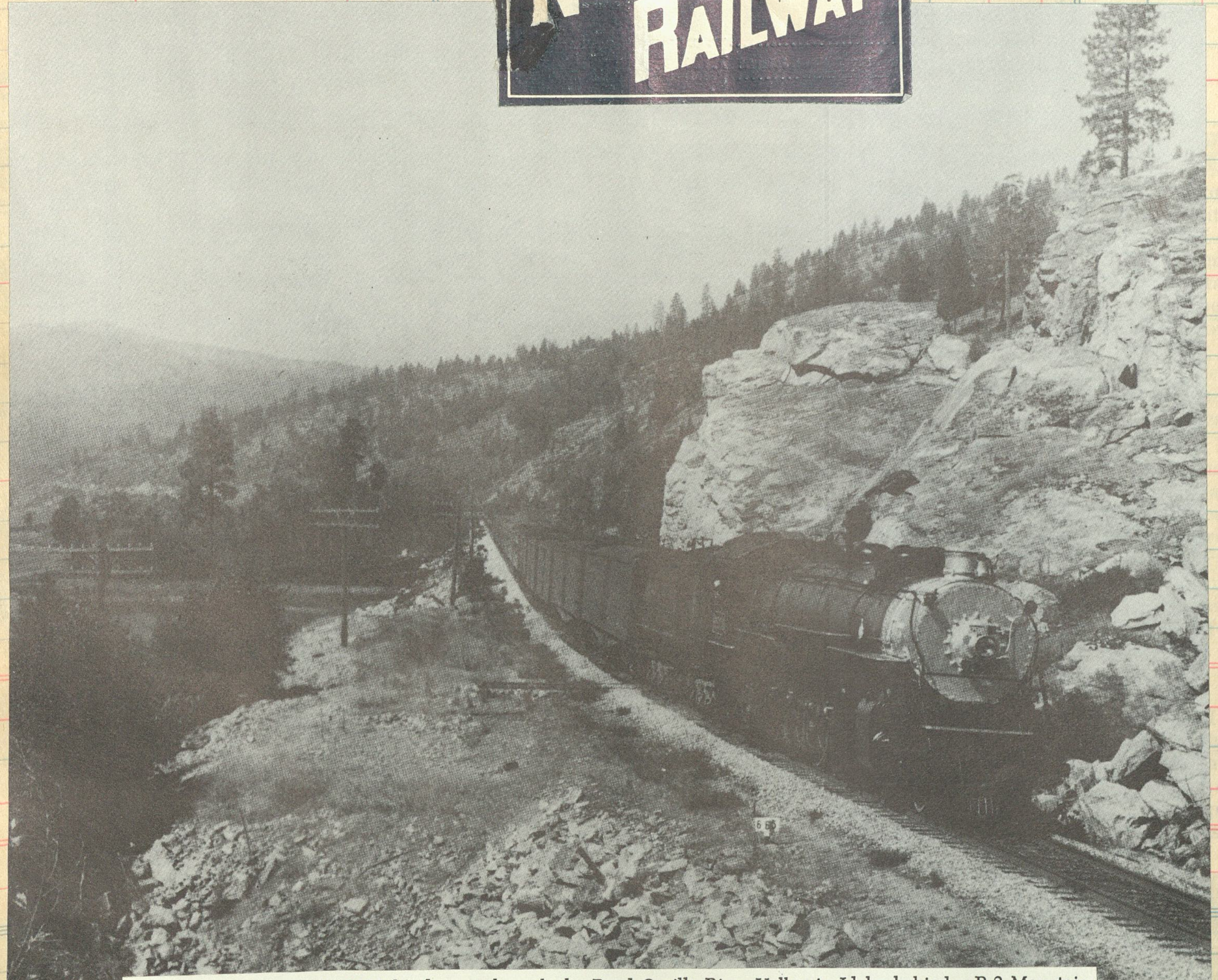


Oriental Limited OKM



C1910 The "Oriental Limited" Crossing the Stone Arch Bridge Between St. Paul and Minneapolis OKM

GREAT
NORTHERN
RAILWAY

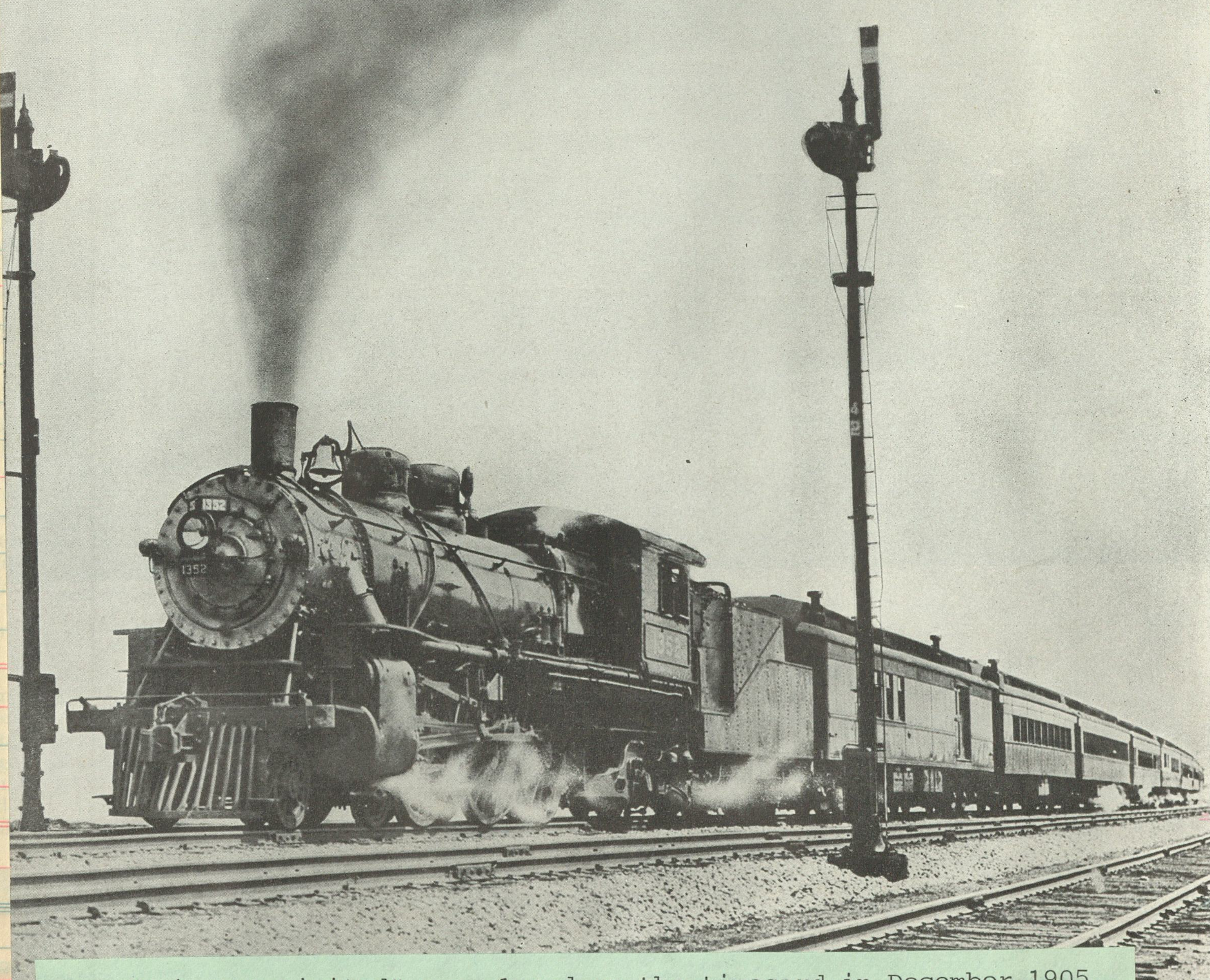


**THE ORIENTAL LIMITED** in 1930 heads east through the Pend Oreille River Valley in Idaho behind a P-2 Mountain type. The express reefers behind the engine carrying fresh salmon from the coast to eastern markets were equipped with special racks for this purpose. GN & CB&Q express reefers were cut into the head end of the Oriental or Builder on every eastbound trip when the salmon were in season. The delicate flavor and firm flesh of the famous King salmon commanded premium prices in the east and these carload shipments moved on the fastest schedules.

## ORIENTAL LIMITED

Between Chicago, St. Paul, Minneapolis, Spokane, Seattle and Portland, with connections to Tacoma, British Columbia and California.

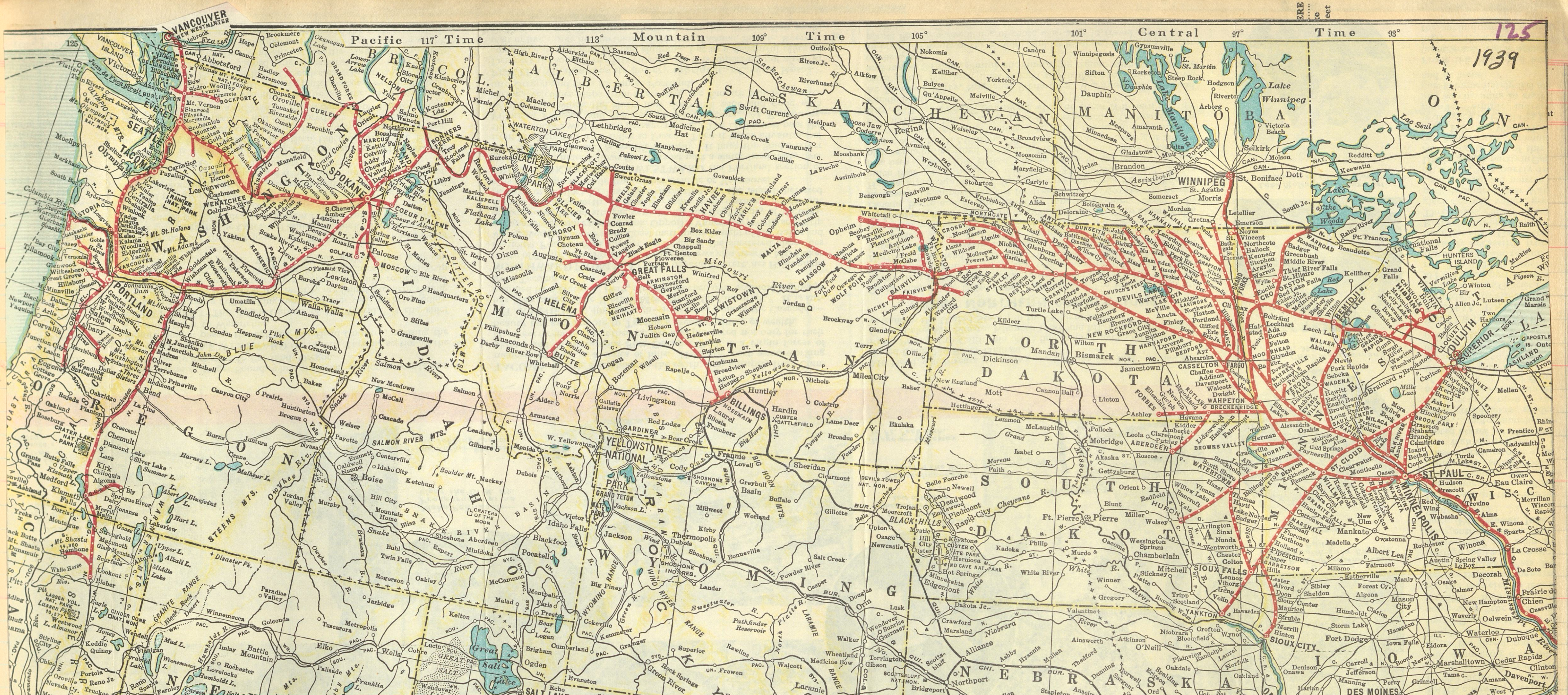
GREAT NORTHERN



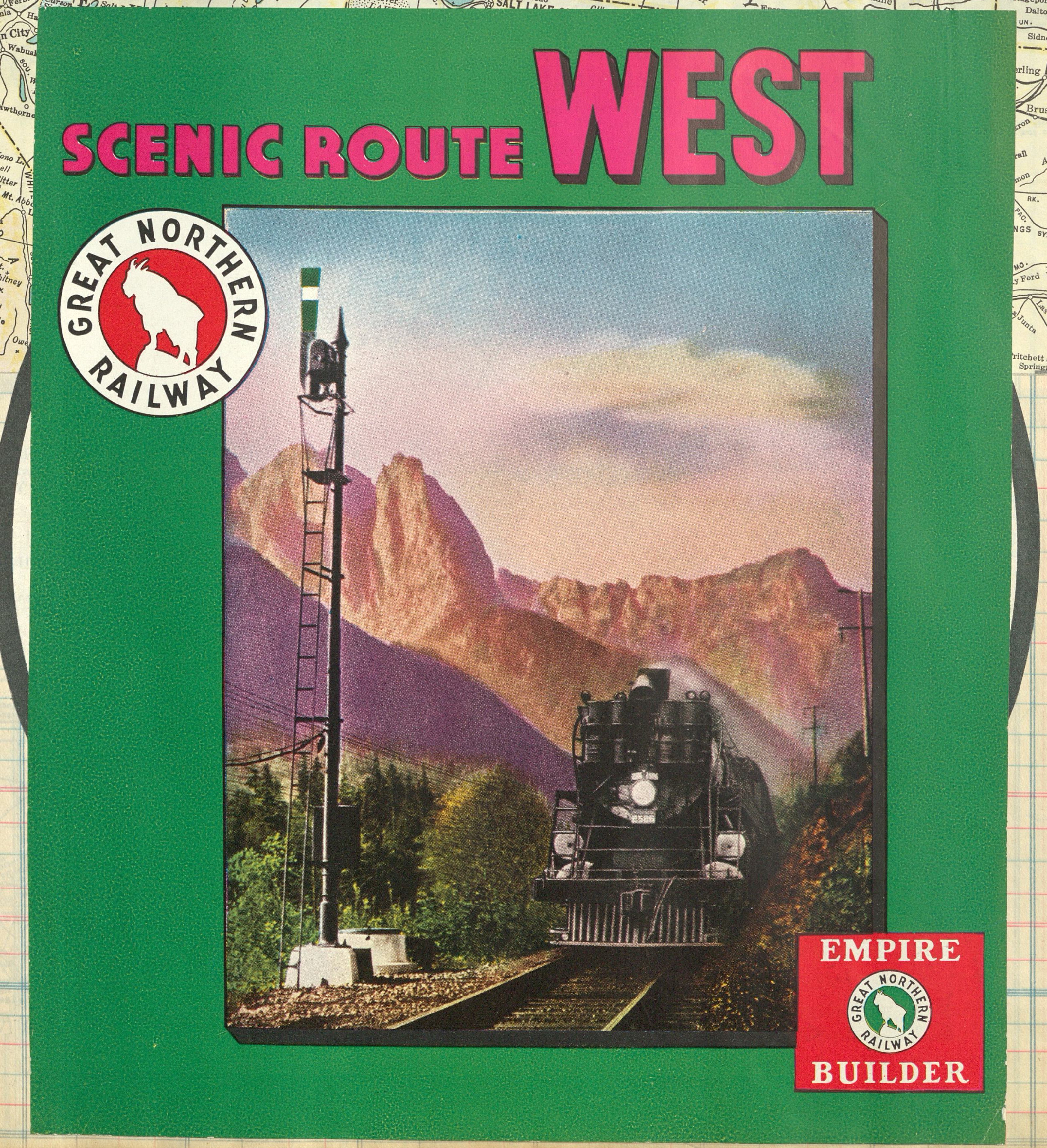
The "Oriental Limited" was placed on the timecard in December 1905. Ran the 1829 miles from StPaul to Seattle in 58 hours.

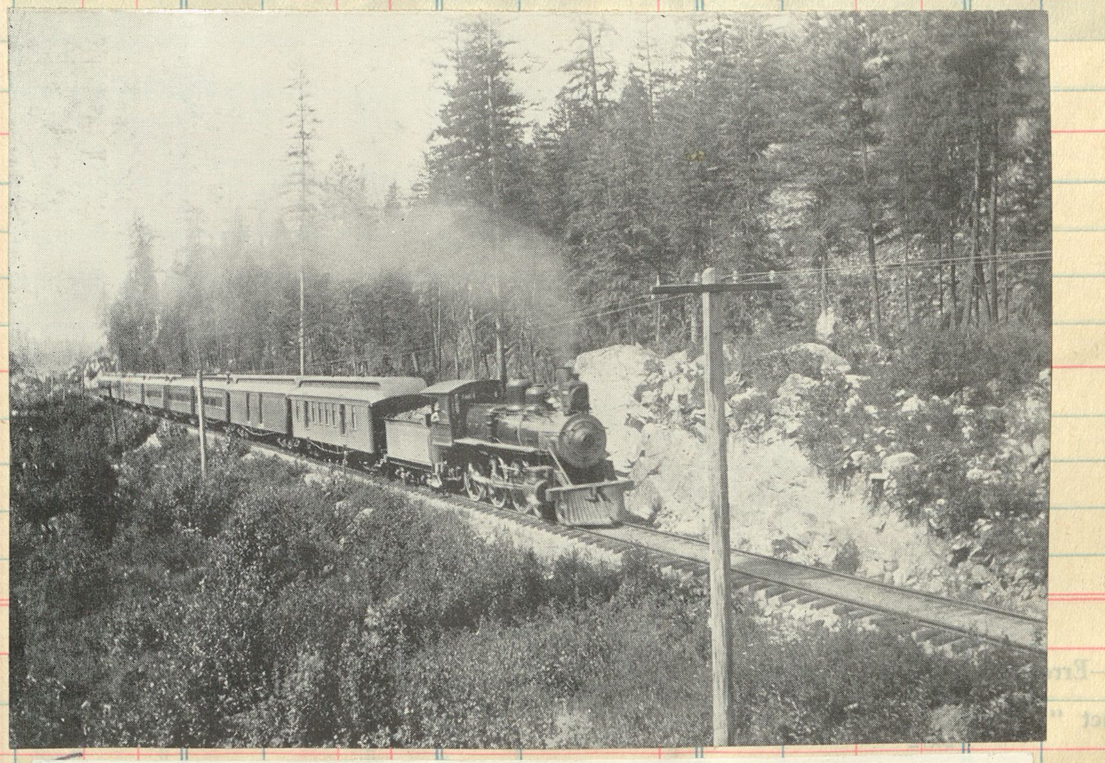
125

1939


Pacific 117° Time
113° Mountain 109° Time
105°
101° Central 97° Time 93°
VANCOUVER
SEATTLE
SPOKANE
PORTLAND
GREAT FALLS
HELENA
BILLINGS
MINOT
GRAND FORKS
FARGO
WINNIPEG
DULUTH
SUPERIOR
ST. PAUL
MINNEAPOLIS
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
IOWA
MINNESOTA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
YELLOWSTONE NATIONAL PARK
GLACIER NAT. PARK

TRAVELED


SCENIC ROUTE WEST
GREAT NORTHERN RAILWAY
EMPIRE BUILDER
GREAT NORTHERN RAILWAY

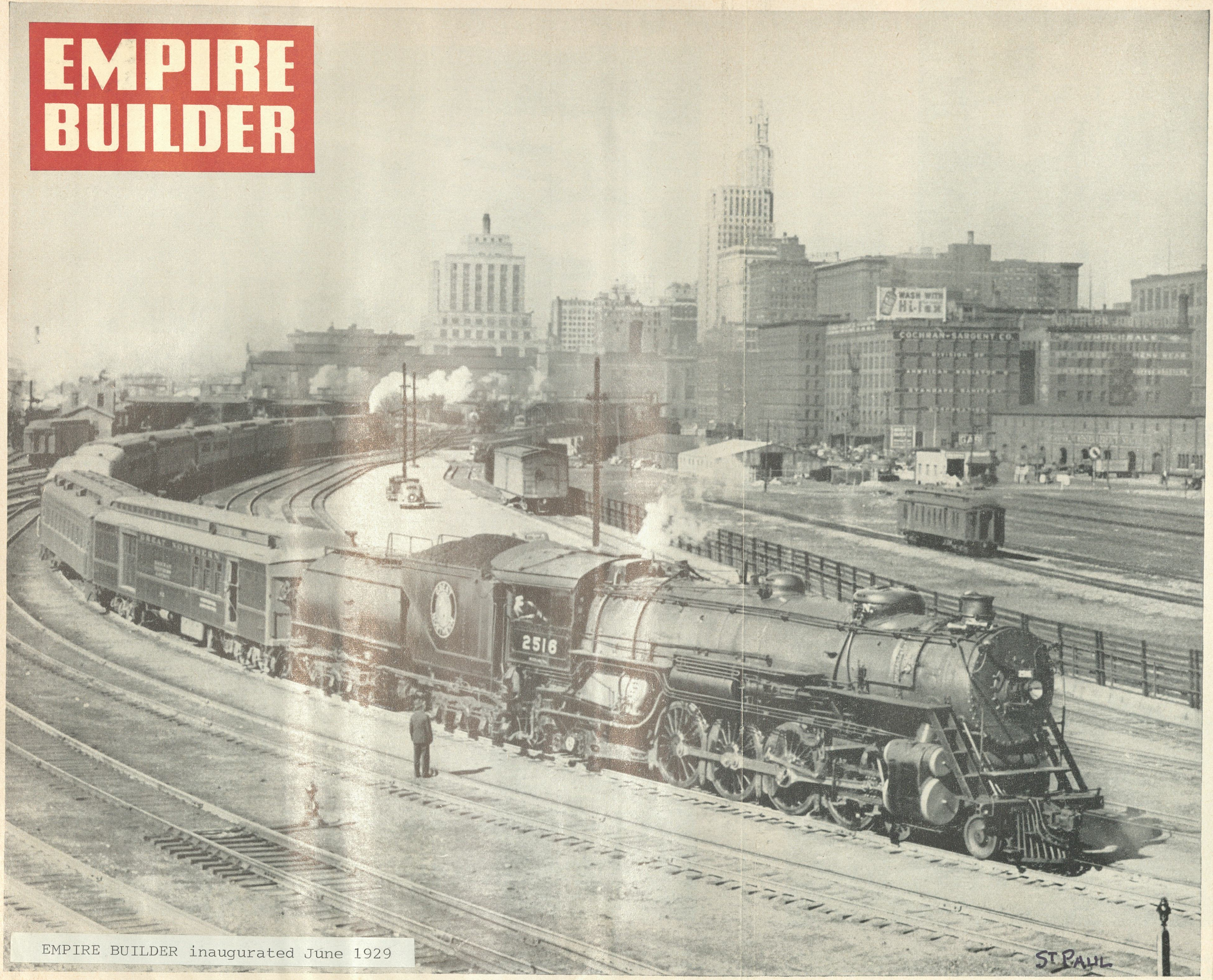


An E-7 Ten wheeler with eight cars of
Trn #1 near Spokane in 1898.

126

AT

# EMPIRE BUILDER



EMPIRE BUILDER inaugurated June 1929

ST PAUL

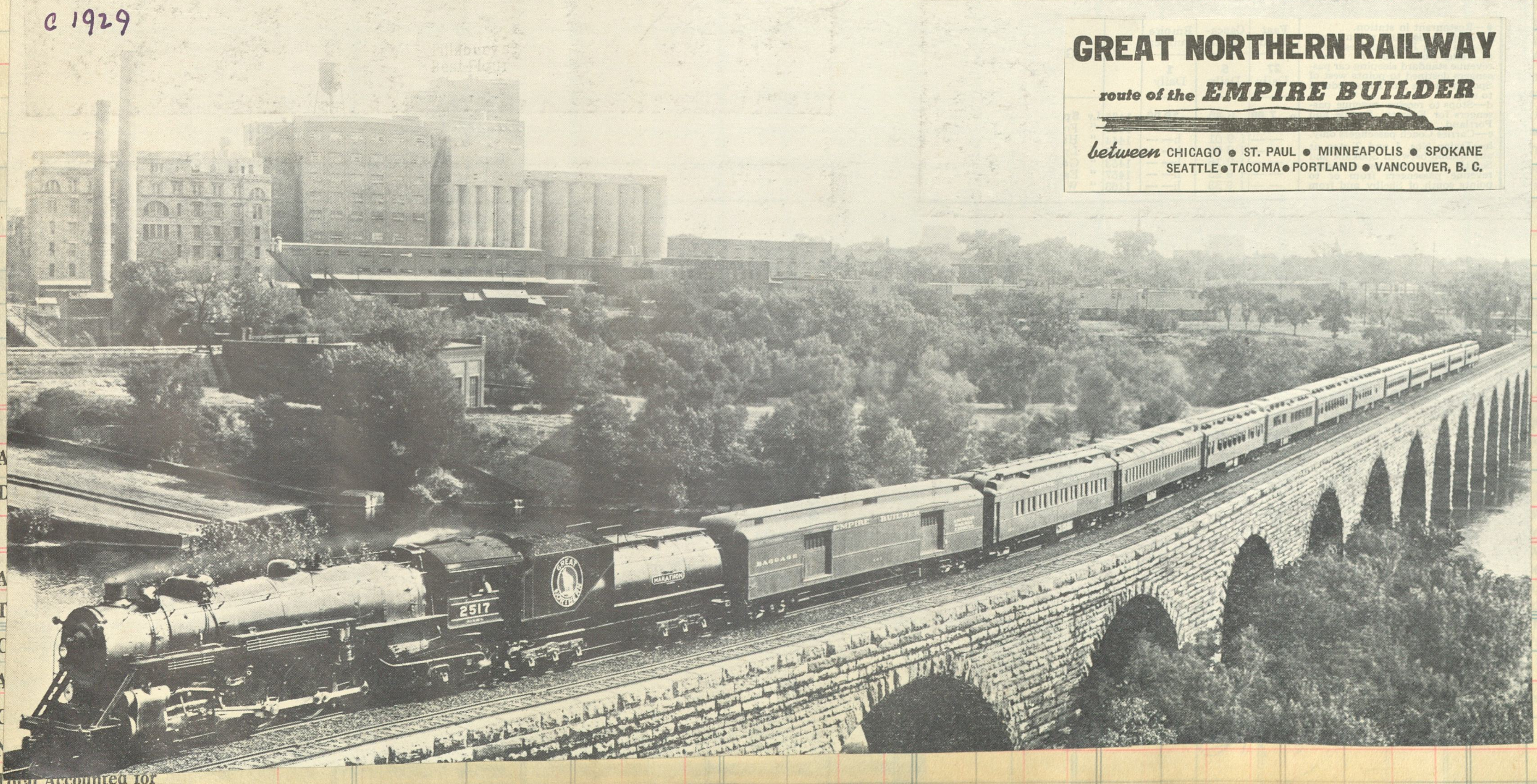
**BEDROOM CARS**

Air-Conditioned six-section-six double-bedroom cars are operated on the Empire Builder the year 'round.

**WESTBOUND EMPIRE BUILDER (No. 1)** OPERATES VIA FARGO, GRAND FORKS AND DEVILS LAKE.

**EASTBOUND EMPIRE BUILDER (No. 2)** OPERATES VIA MINOT, NEW ROCKFORD AND FARGO.

c 1929



## GREAT NORTHERN RAILWAY

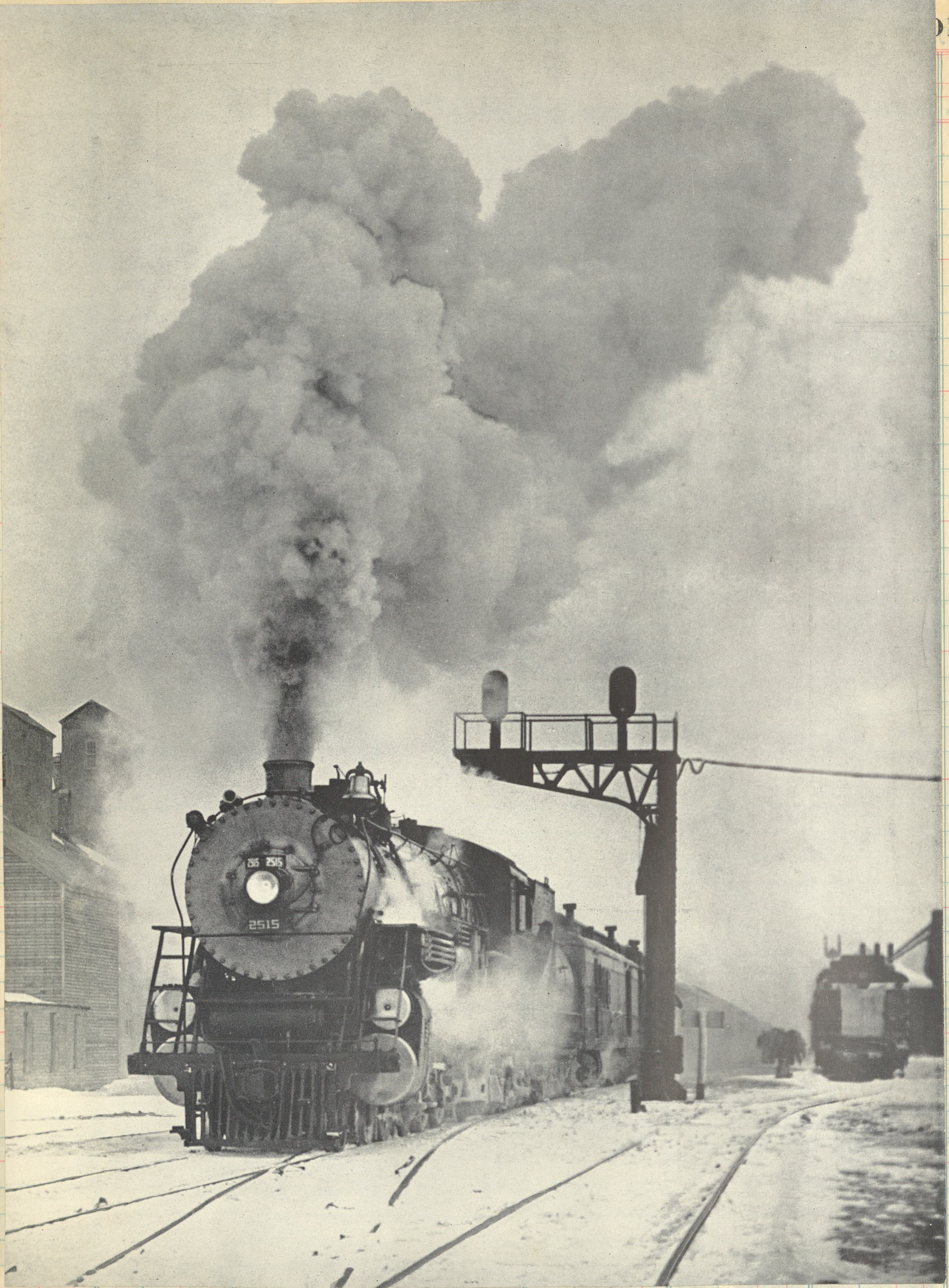
*route of the* **EMPIRE BUILDER**

*between* CHICAGO ● ST. PAUL ● MINNEAPOLIS ● SPOKANE
SEATTLE ● TACOMA ● PORTLAND ● VANCOUVER, B. C.

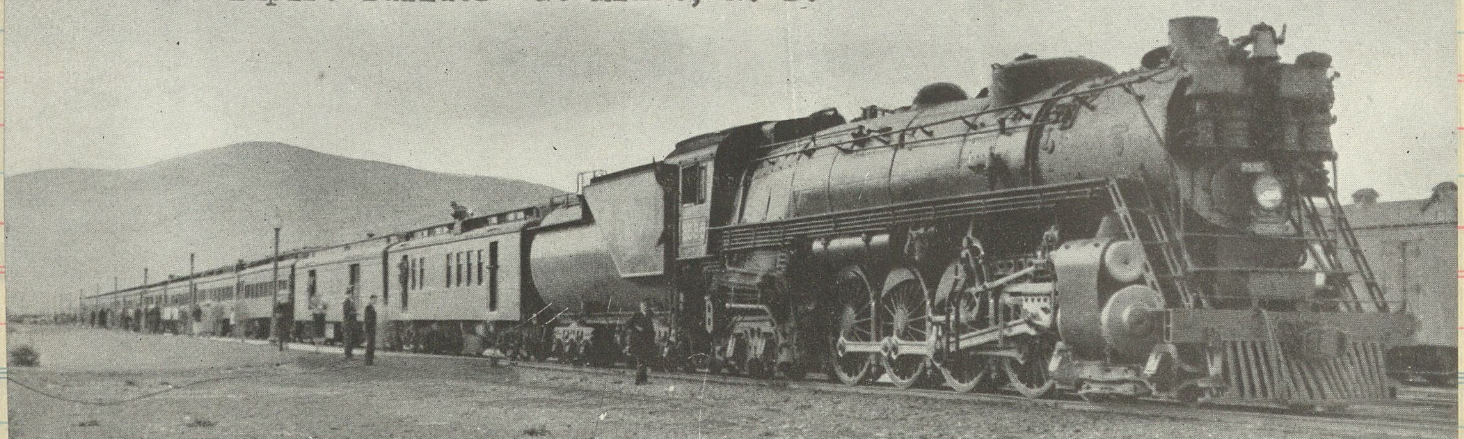
## GREAT NORTHERN TRAINS ARRIVE AND DEPART FROM THE FOLLOWING STATIONS.

**CHICAGO, ILL.:** Union Station. Canal and Adams Sts. (The New Empire Builder and Oriental Limited trains operated by Burlington between St. Paul and Chicago.)
**BUTTE, MONT.:** Great Northern Depot. 800 Block So. Arizona St.
**DULUTH, MINN.:** Union Depot. Michigan St. and Fifth Ave. West.
**FARGO, N. D.:** Great Northern Passenger Station. Broadway and Fifth Avenue North.
**GRAND FORKS, N. D.:** Great Northern Passenger Station. 625 Demers Avenue.
**GREAT FALLS, MONT.:** Great Northern Station. Foot of First Avenue South.
**HELENA, MONT.:** Great Northern Passenger Depot. Neill Ave., between Getchell and Front Sts.
**MINNEAPOLIS, MINN.** Great Northern Passenger Station. 2 Hennepin Avenue.
**PORTLAND, ORE.:** Union Station. Southwest Sixth Ave. at Irving.
**ST. PAUL, MINN.** Union Depot. 214 East Fourth Street.
**SEATTLE, WASH.:** King Street Station. King Street and Second Avenue South.
**SIOUX CITY, IOWA:** Great Northern-Burlington Station. Third and Douglas Streets.
**SIOUX FALLS, S. D.:** Great Northern Depot. 503 East Eighth St.
**SPOKANE, WASH.:** Great Northern Station. Havermale Island foot of Stevens Street.
**SUPERIOR, WIS.:** Union Depot. Broadway and Oaks Avenue.
**TACOMA, WASH.:** Union Depot. 1713 Pacific Avenue.
**VANCOUVER, B. C.:** Great Northern Depot. 1150 Main Street.
**WINNIPEG, MAN.:** Union Station. Cor. Broadway and Main Sts.

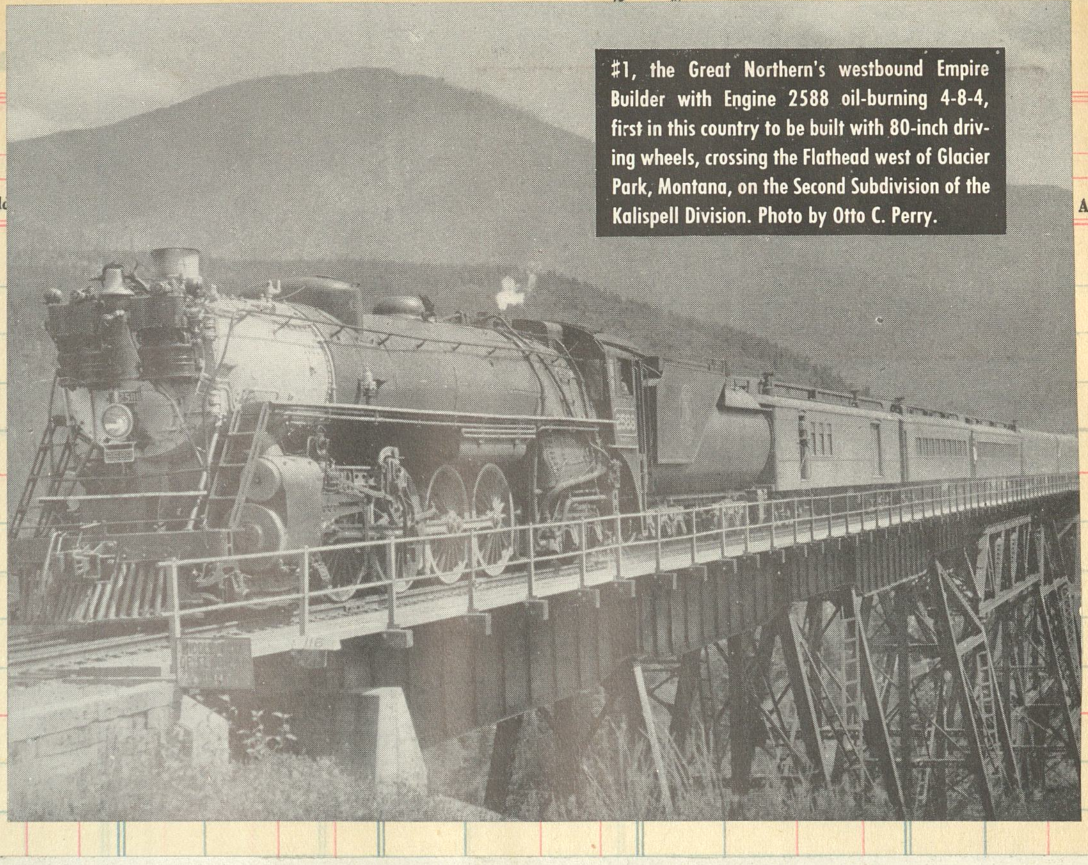
Total Accounted for



The "Empire" gets under way at Benson, Minn.

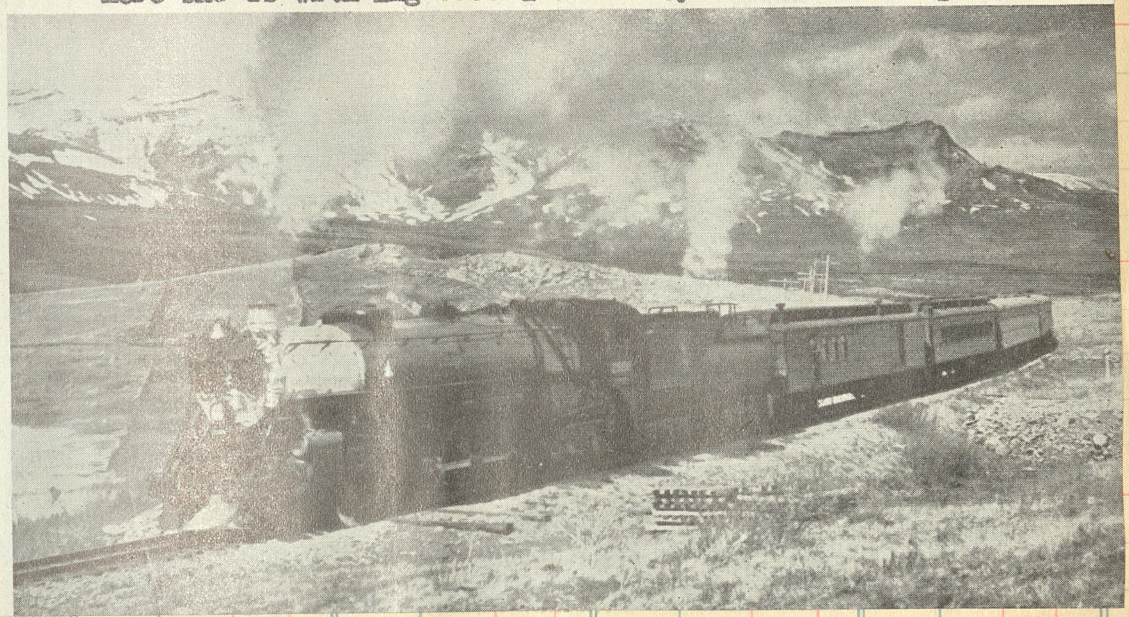


The "Empire Builder" at Minot, N. D.



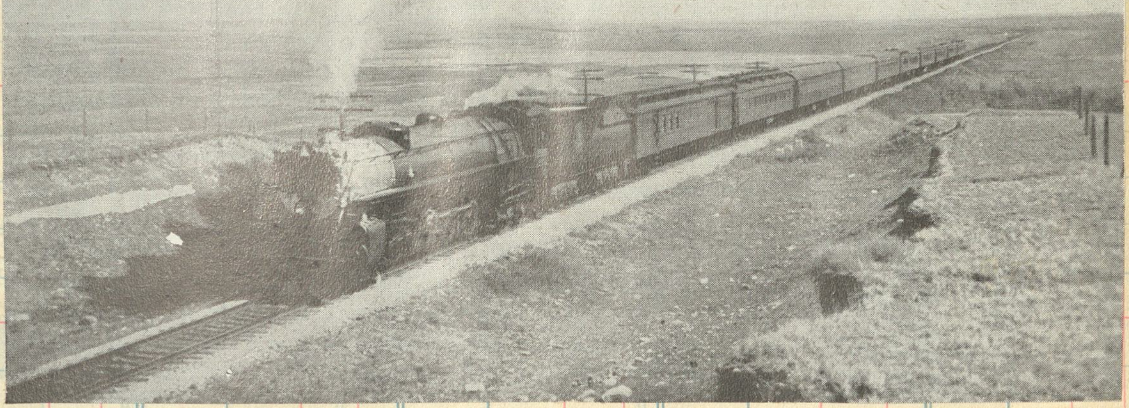
#1, the Great Northern's westbound Empire Builder with Engine 2588 oil-burning 4-8-4, first in this country to be built with 80-inch driving wheels, crossing the Flathead west of Glacier Park, Montana, on the Second Subdivision of the Kalispell Division. Photo by Otto C. Perry.

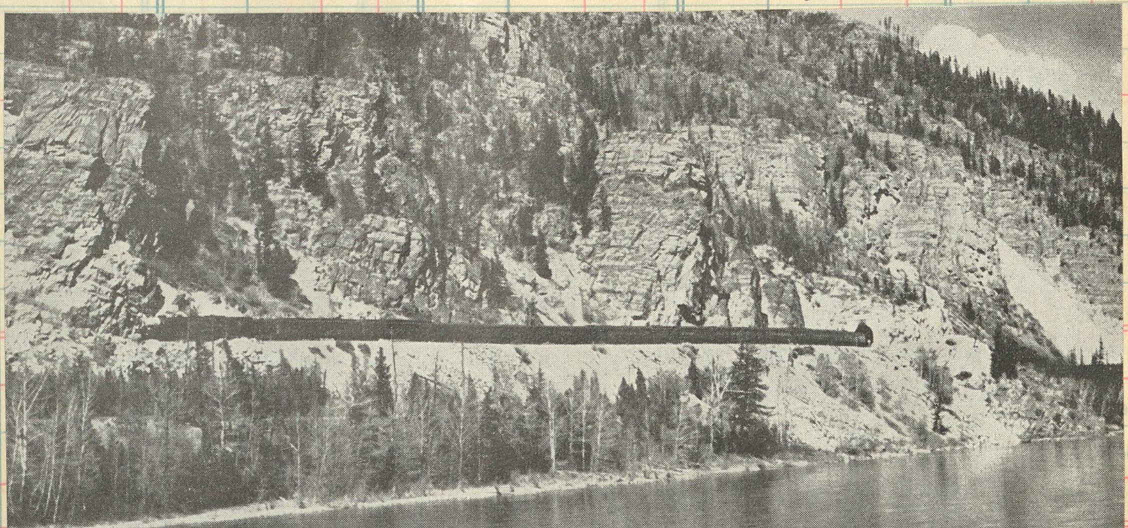
The westbound "Empire Builder" climbing the hill to Summit. Here she is with Eng 2588 a short ways west of Rising Wolf.



The Glacier National Park "Rockies" in background

#1, the "Empire Builder" with Eng 2588 starting to haul her ten cars up the grade to Marias Pass. Shown here near Browning, Montana.

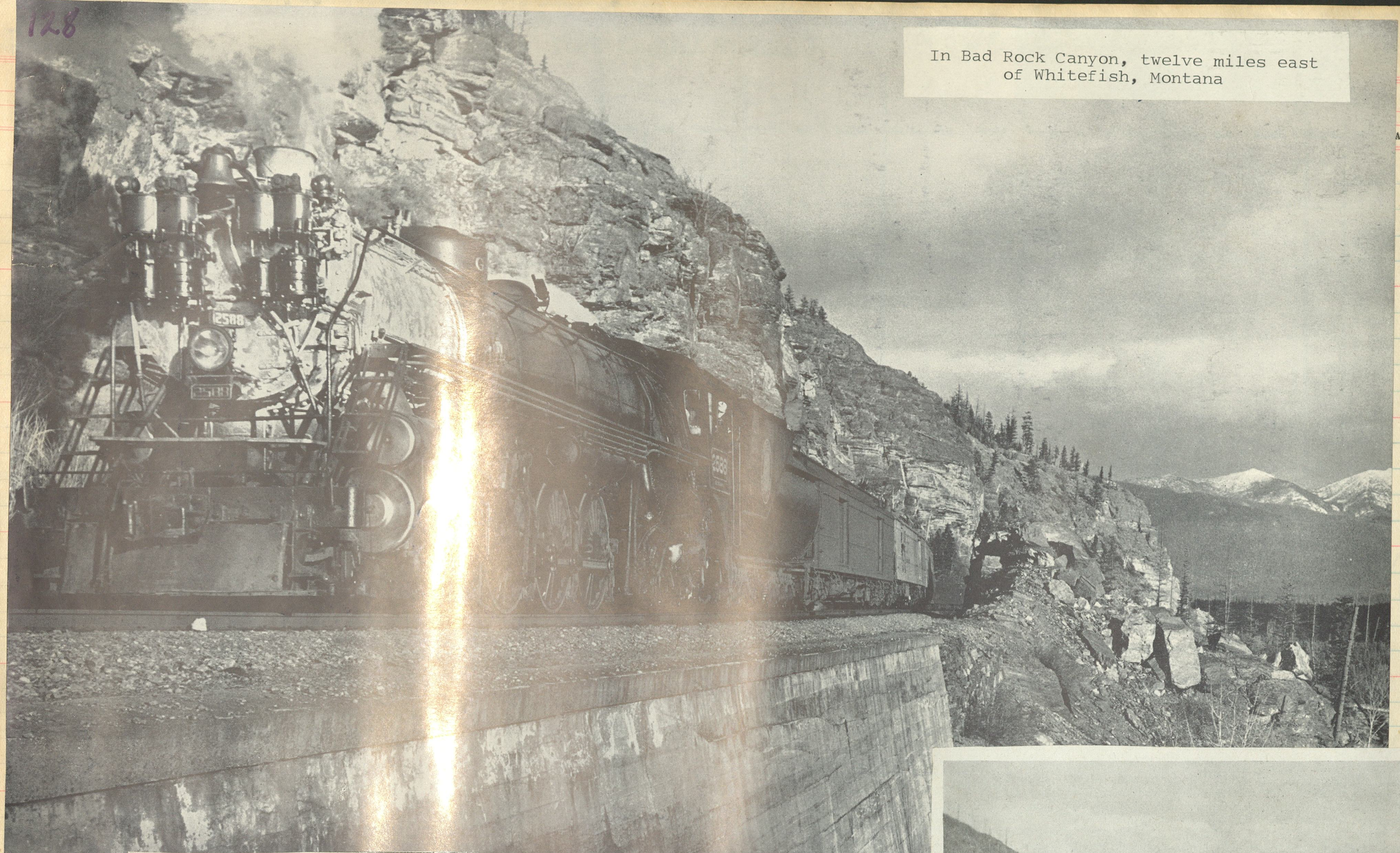




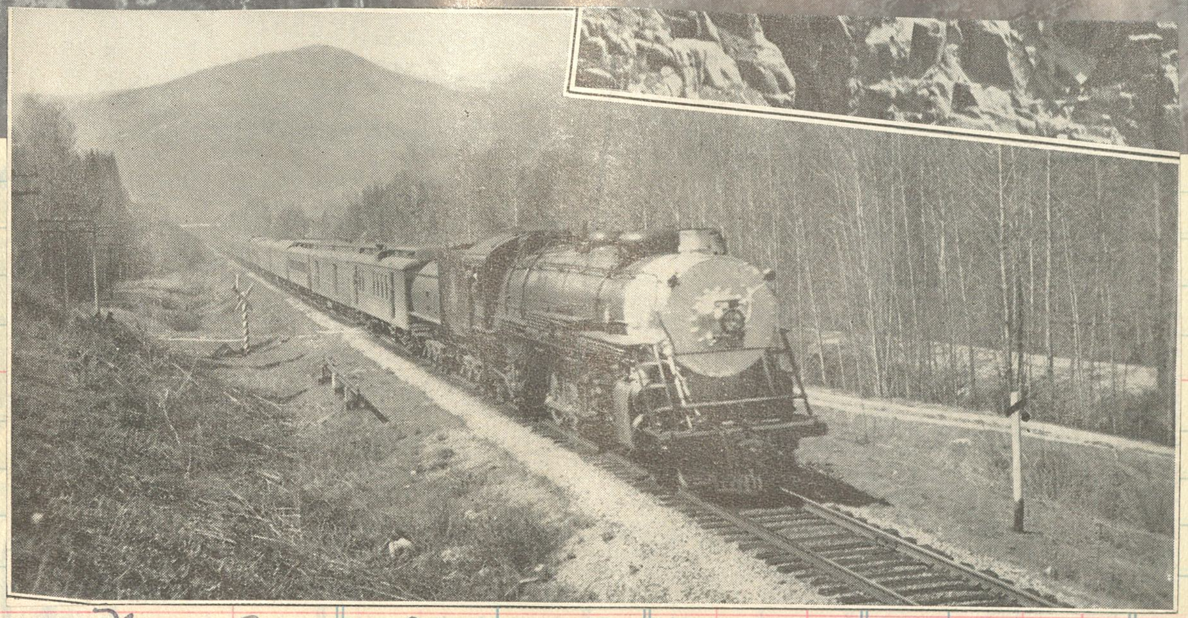
The "Empire Builder" in Bad Rock Canyon

AT

Amount Clos. No. Sold Amount Clos. No. Sold Amou



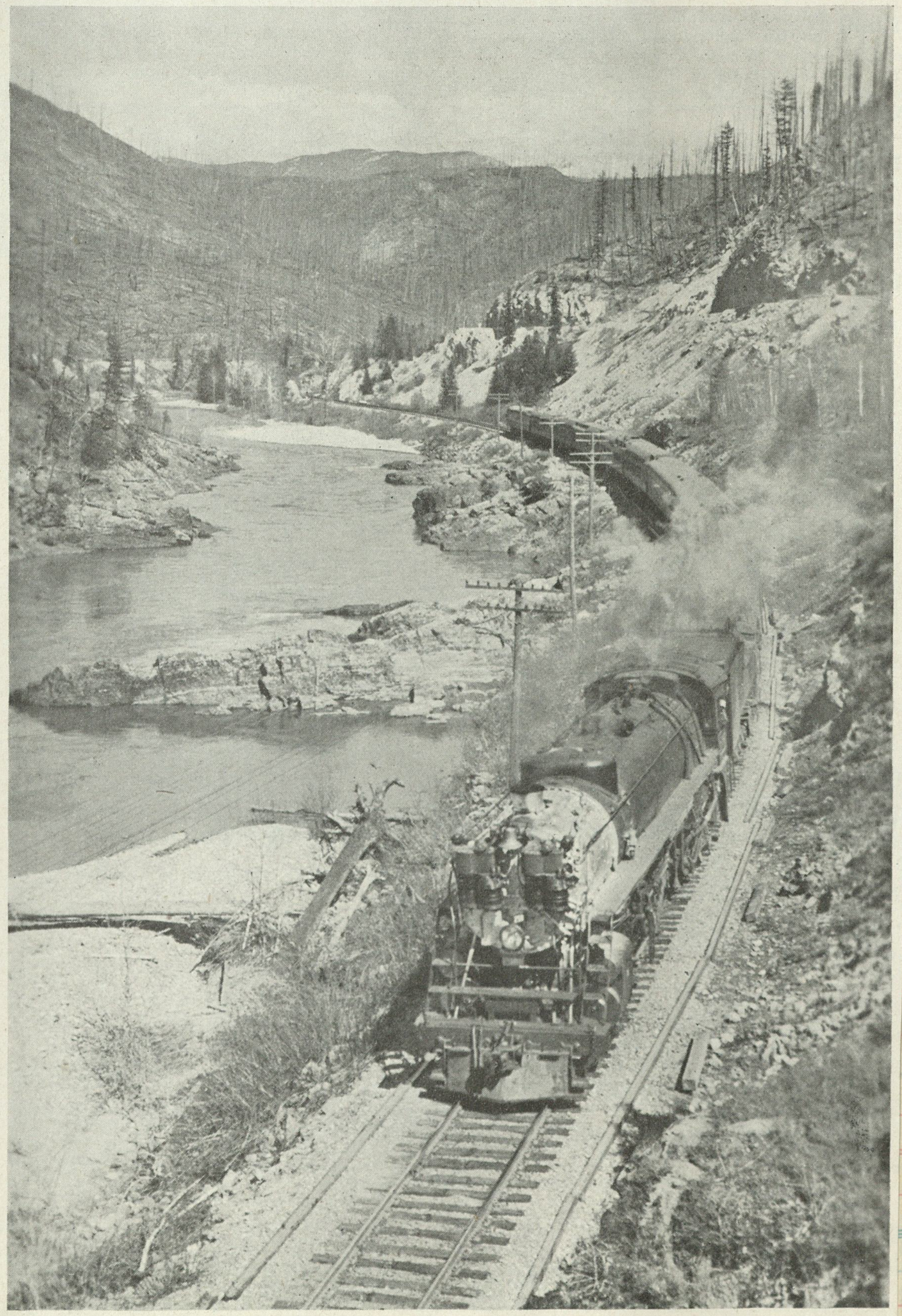
In Bad Rock Canyon, twelve miles east of Whitefish, Montana



Near Samuels, Idaho

EMPIRE BUILDER
EMPIRE BUILDER

At Shelby, Mont.



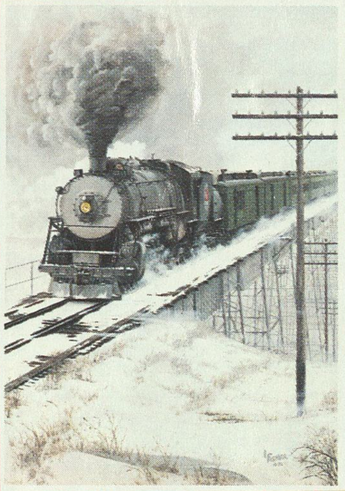
The pride of the Big G, #1, the "Empire Builder" drifts along behind Eng 2588 beside the Middlefork of the Flathead River thru Stevens Canyon. This is between Red Eagle and Belton, Montana.

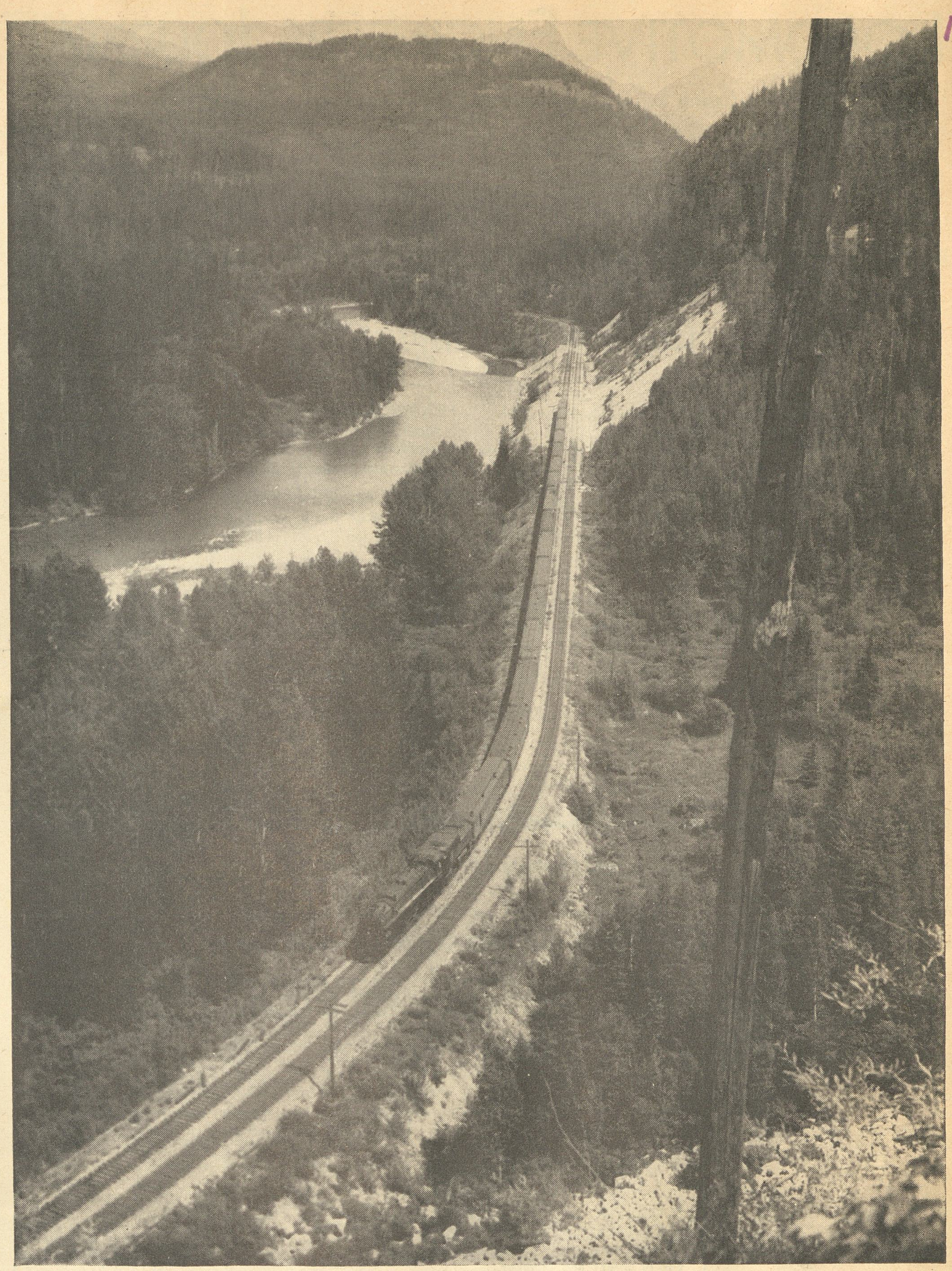
*Go* GREAT NORTHERN
via the
EMPIRE BUILDER
Air-Conditioned
FAST • SAFE • COMFORTABLE • ECONOMICAL

RECORD ST

Clos. Sold Amount Clos. No. Sold Amount Clos. No.

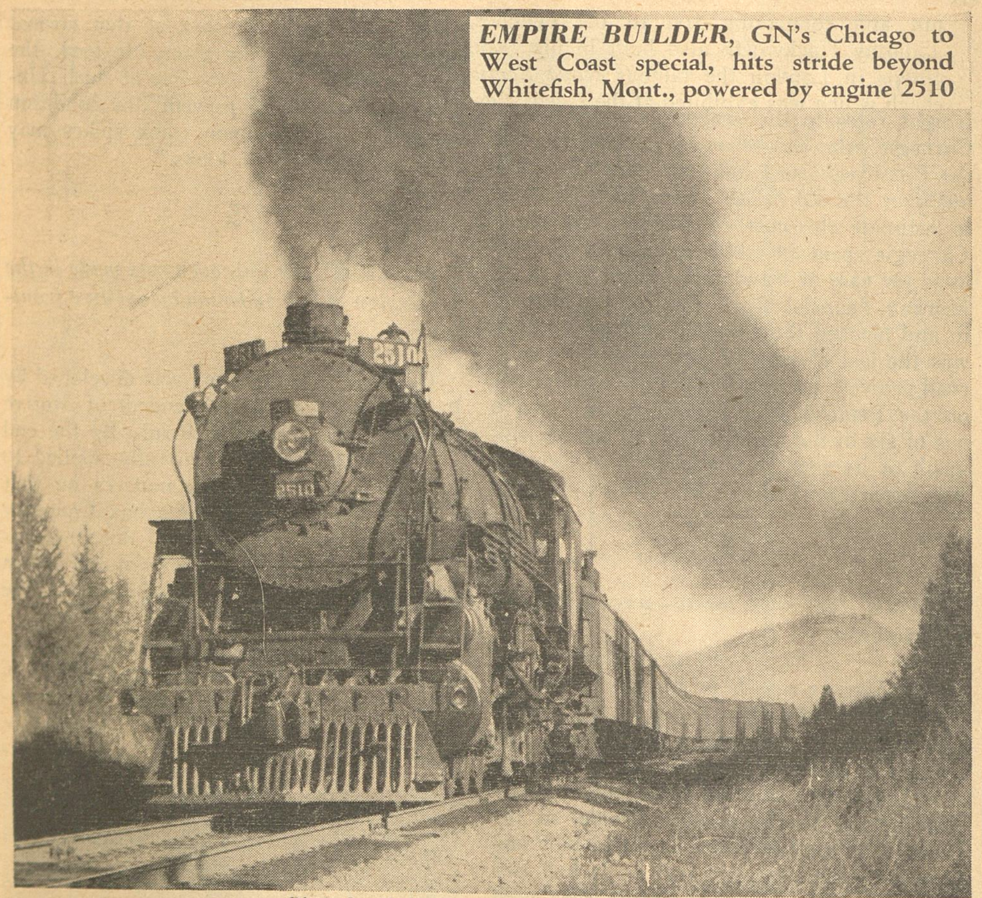
EMPIRE
GREAT NORTHERN
BUILDER
SARRA





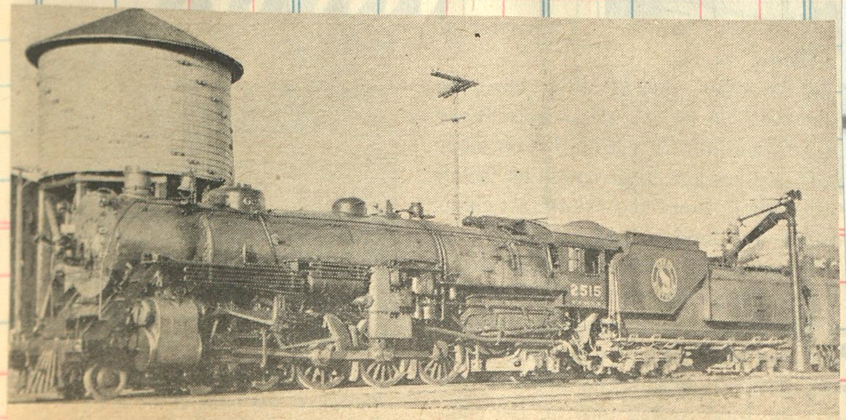
## Nature's Solemn Grandeur

The Empire Builder, transcontinental train of the Great Northern Railroad, traverses a scenic region of The Rockies along the Flathead river, which marks the southern boundary of Glacier National Park.



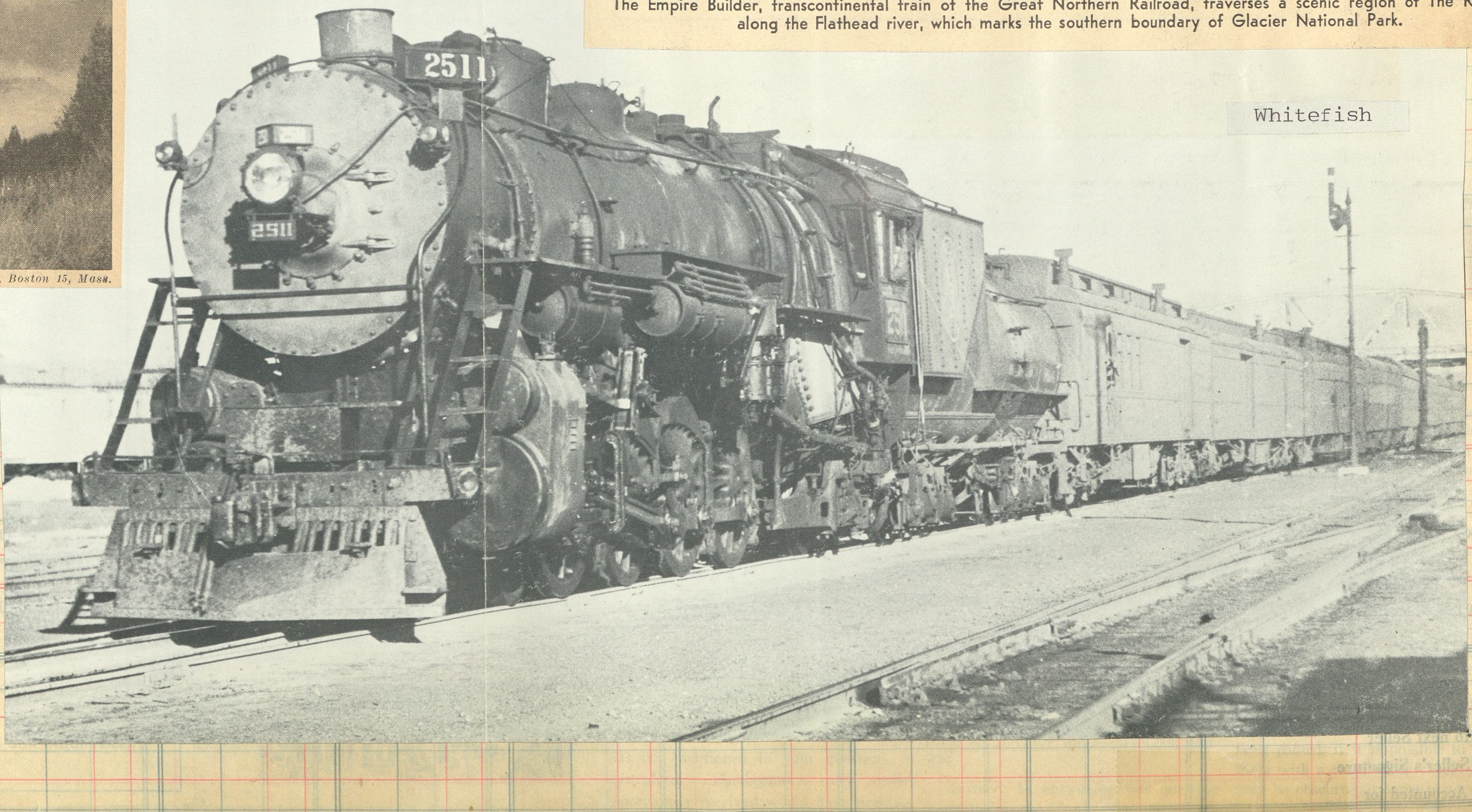
**EMPIRE BUILDER**, GN's Chicago to West Coast special, hits stride beyond Whitefish, Mont., powered by engine 2510

Photo by R. W. Pontin, Rail Photo Serv., 93 Mass. Ave., Boston 15, Mass.

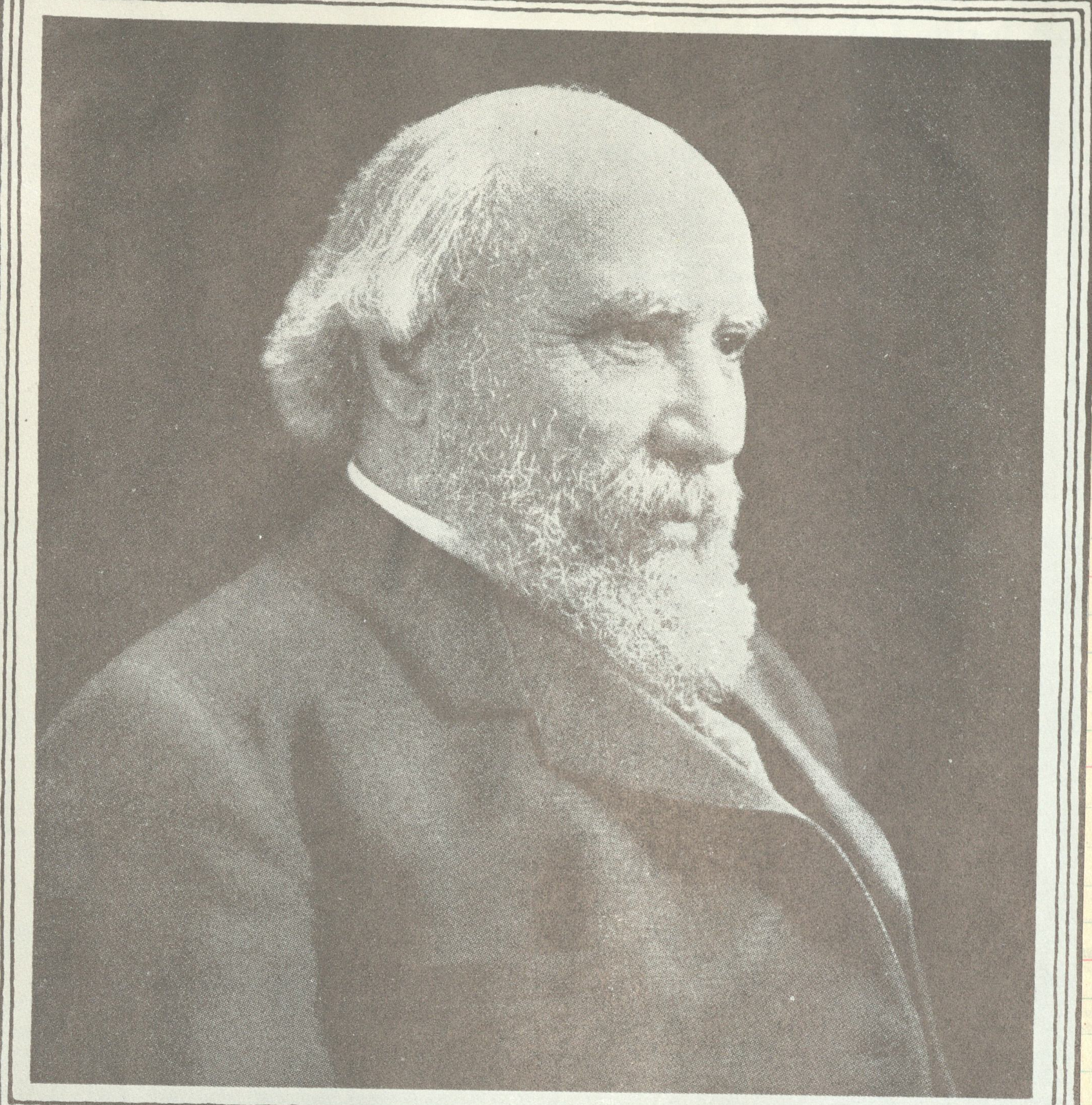


GREAT NORTHERN'S ENGINE 2515 AT DEVILS LAKE, N.D.

Donald V



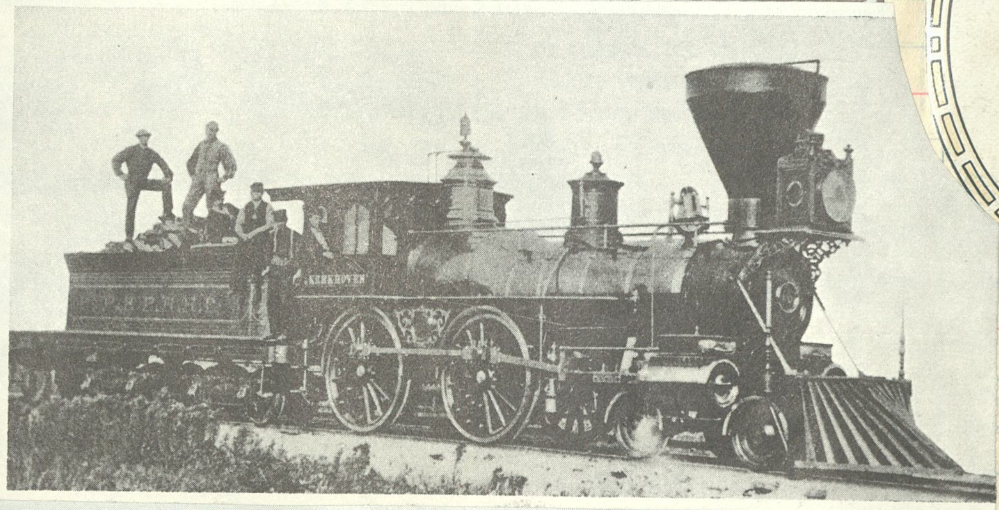
Whitefish

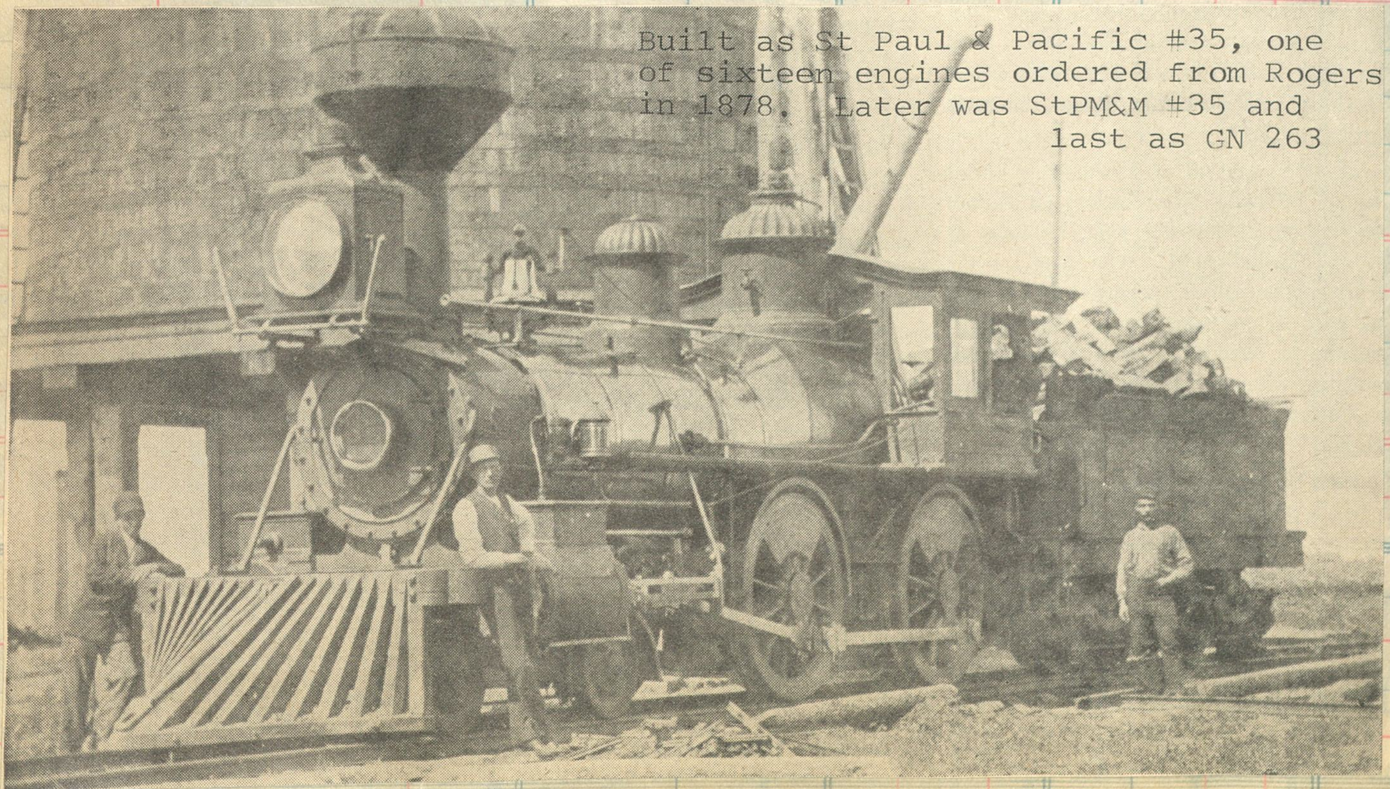


**JAMES J. HILL**
**The Empire Builder**
1838 - 1916

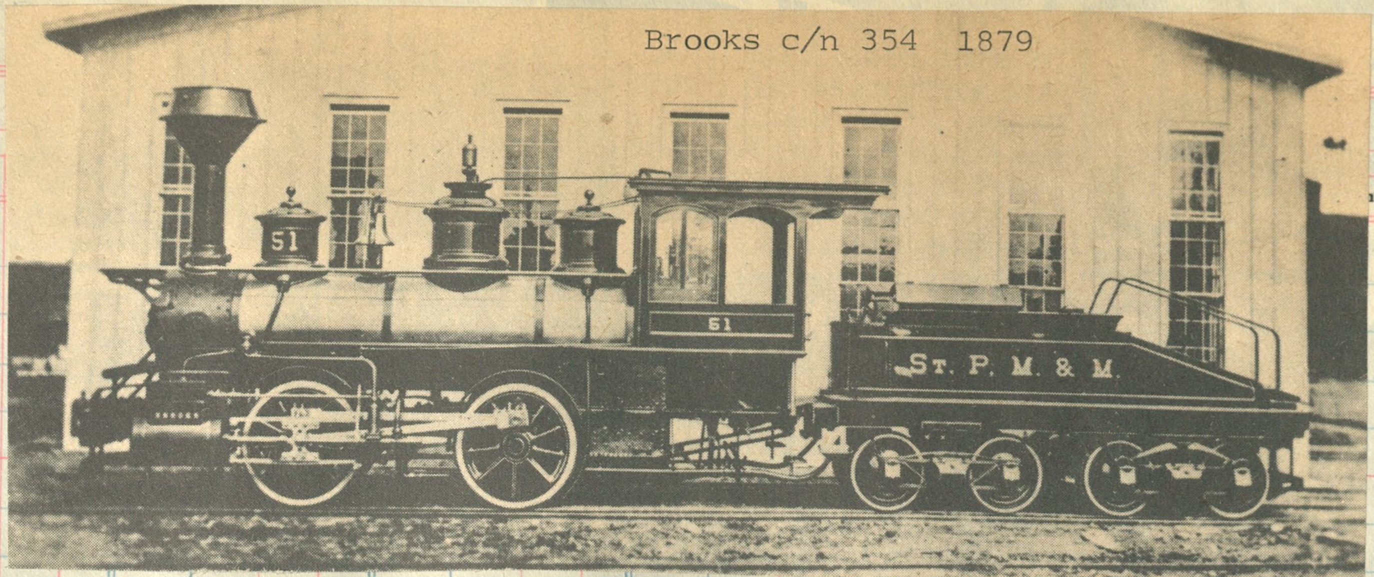
**ST. PAUL & PACIFIC RAILROAD** acquired Engine 16 from the Danforth Locomotive & Machine Co. in 1869 and named her the KERKHOVEN, reflecting the influence of the Dutch bondholders who financed much of the early construction. The road was completed from St Paul to Breckenridge, Minnesota, on the Red River of the North, in 1871 and was in a receivership in 1873. The 4-4-0 KERKHOVEN joined sister engines bearing such names as EDMUND RICE, JUD RICE, ANOKA, JARED BENSON, F. R. DELANO, GEORGE L. BECKER, and WAYZATA. No. 16 had 63 inch drivers, 16 x 24 inch cylinders, and was a woodburner, later converted to coal. Under Great Northern control, she was renumbered 240 and scrapped in 1916.

(Courtesy of Great Northern Railway)

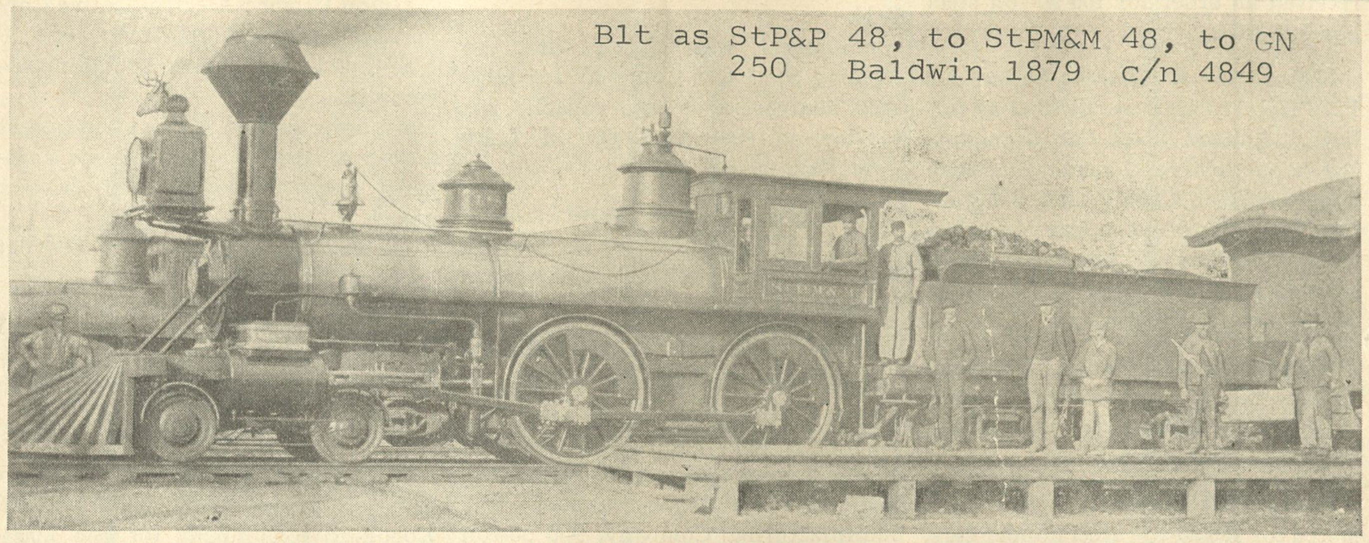




Built as St Paul & Pacific #35, one of sixteen engines ordered from Rogers in 1878. Later was StPM&M #35 and last as GN 263



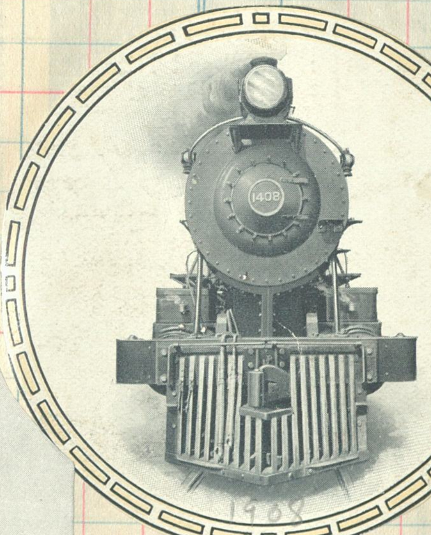
Brooks c/n 354 1879



Blt as StP&P 48, to StPM&M 48, to GN 250 Baldwin 1879 c/n 4849

ENGINE 48 OF THE ST. PAUL, MINNEAPOLIS & MANITOBA AT FERGUS FALLS, MINN., AUGUST, 1884

Brother Thomas R. Jones, Div. 392 standing in the gangway, fired this Baldwin in passenger service from 1882 to 1884, between Fergus Falls and St. Vincent, Minn. The engineer is John Senserbox.

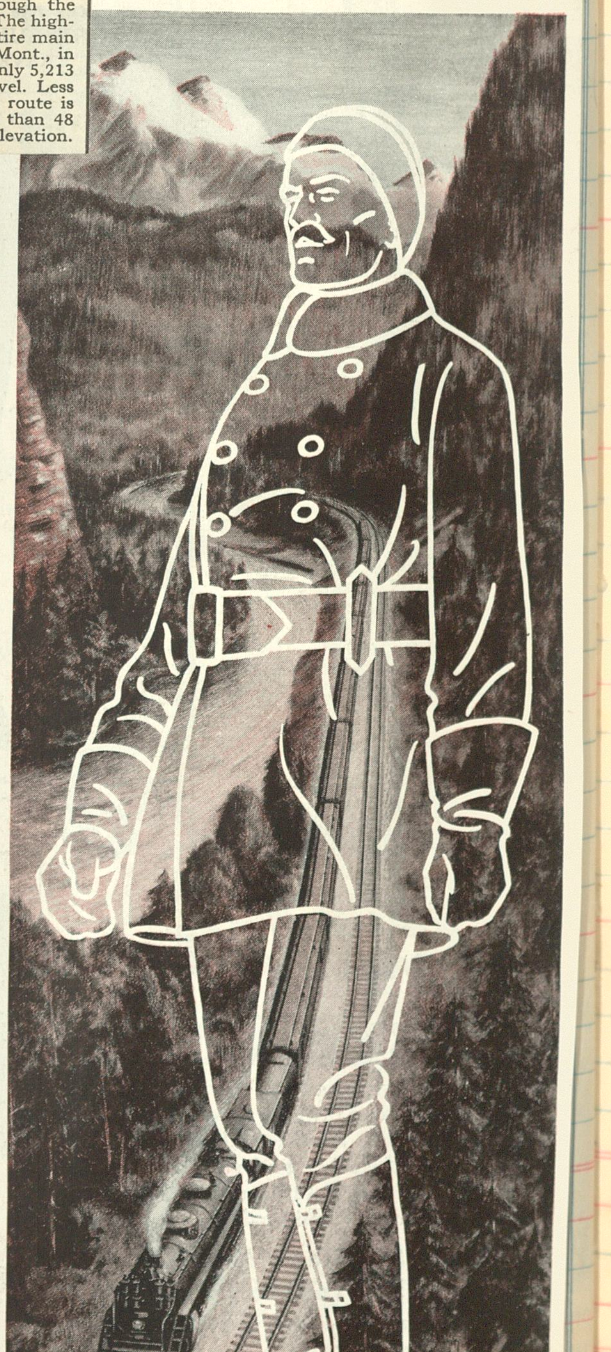


1908

GREAT NORTHERN RAILWAY

## Low Altitude Route

The Great Northern has the lowest altitude through the northern Rockies. The highest point on the entire main line is at Summit, Mont., in Marias Pass. It is only 5,213 feet above sea level. Less than 8 miles of the route is 5,000 feet, and less than 48 miles is 4,000 feet elevation.



# *Rolling through the Rockies*

YOUR uniformed sons and daughters, traveling over America on the Great Northern Railway, cross the Continental Divide almost without knowing it. The train follows a natural route—easy as a game trail—through the scenic grandeur of the Montana Rockies. That is Marias Pass!

At the top of the pass—at Summit, Montana—they see a statue of its discoverer, John F. Stevens, who still is living. In December, 1889, Stevens found a broad, natural corridor through the Rockies, which provided the lowest (5,213 feet) and easiest railway pass in the northern United States.

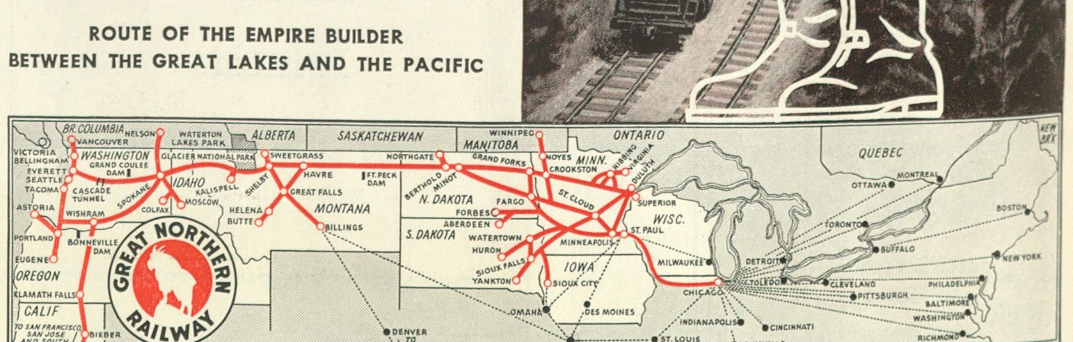
Stevens' discovery not only gave Great Northern its low-altitude pass through the mountains, it also led to establishment of Glacier National Park—the only national park on the main line of an American railway.

Manpower, firepower and supplies for America and her Allies are rolling through the Rockies faster and on time because Marias Pass affords swifter, safer handling of trains.

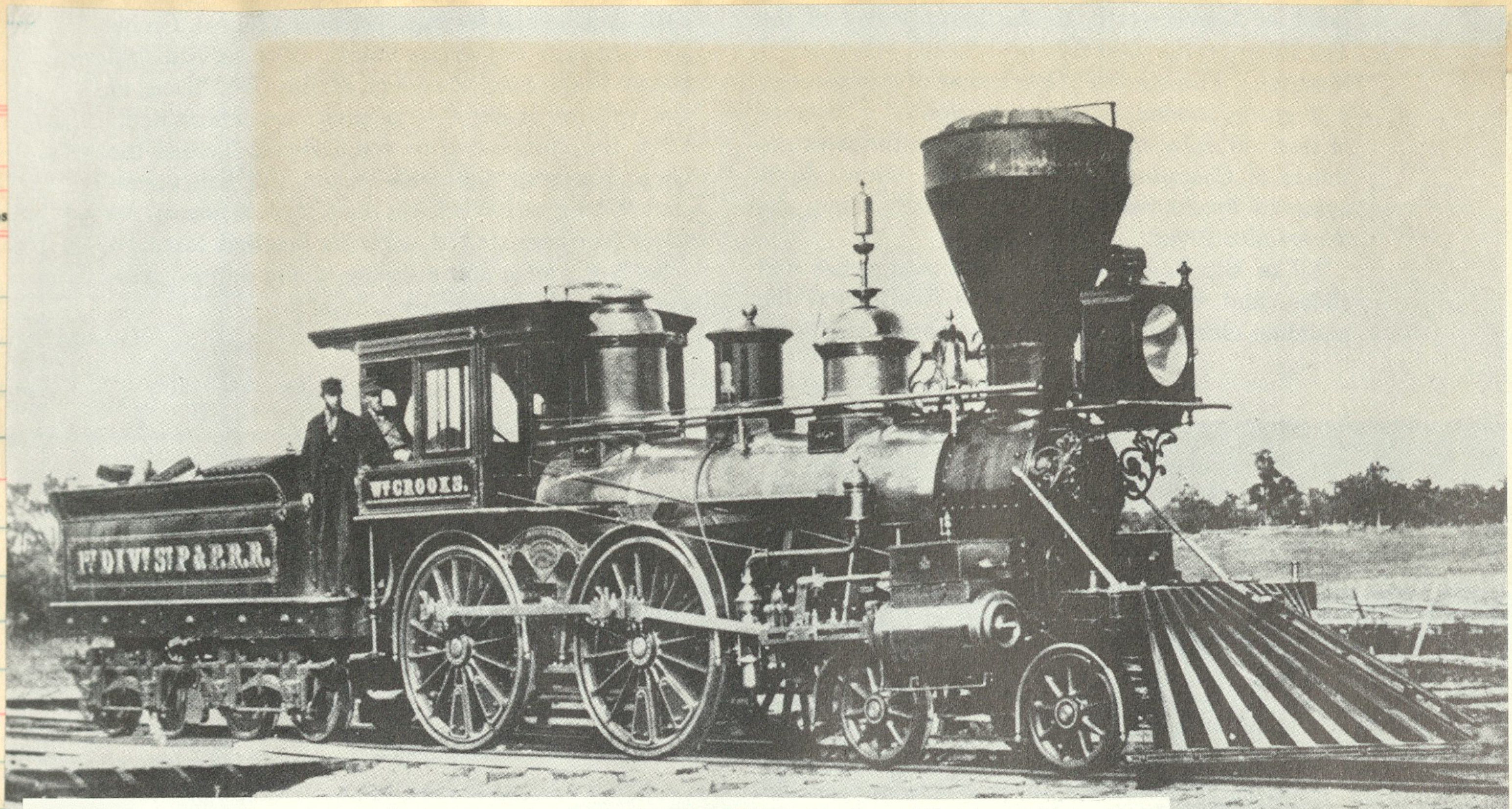
Marias Pass helps make Great Northern dependable—a vital artery to Victory.

**GREAT NORTHERN RAILWAY**

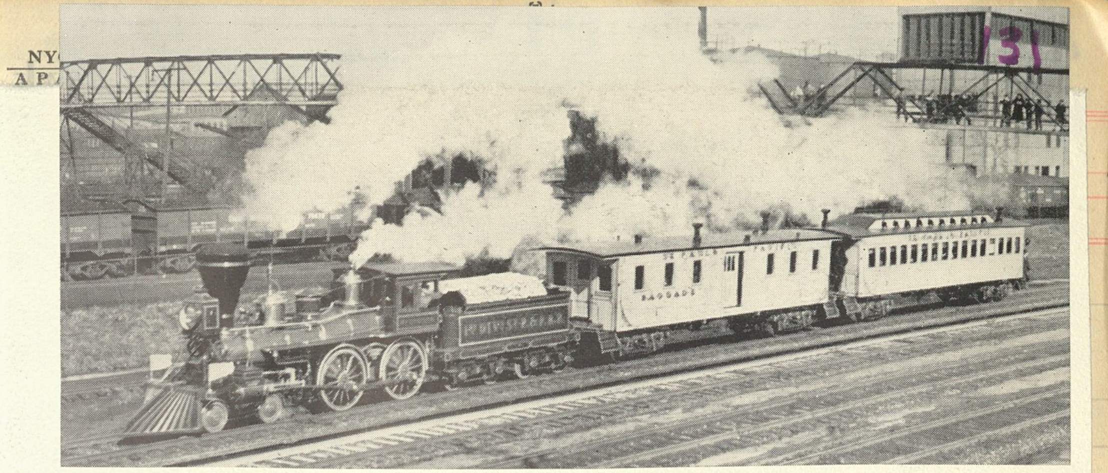
ROUTE OF THE EMPIRE BUILDER
BETWEEN THE GREAT LAKES AND THE PACIFIC

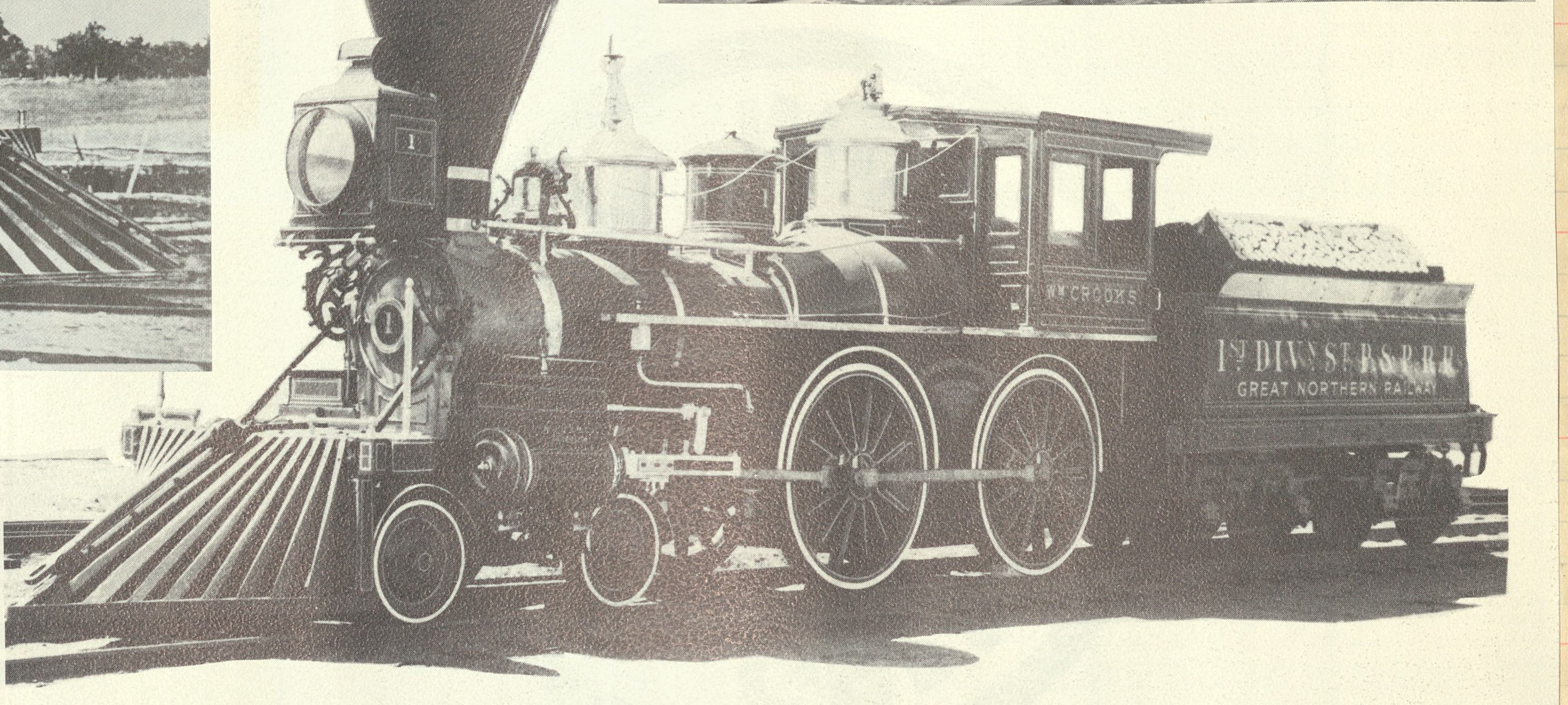

BR. COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
VANCOUVER
LAKES PARK
VICTORIA
BELLINGHAM
WASHINGTON
GRAND COULEE DAM
GLACIER NATIONAL PARK
SWEETGRASS
NORTHGATE
GRAND FORKS
NOYES
MINN.
HIBBING
VIRGINIA
DULUTH
EVERETT
SEATTLE
TACOMA
CASCADE TUNNEL
SPOKANE
IDAHO
KALISPELL
SHELBY
HAVRE
FT. PECK DAM
BERTHOLD
MINOT
CROOKSTON
ST. CLOUD
SUPERIOR
ASTORIA
WISHRAM
COLFAX
MOSCOW
GREAT FALLS
HELENA
BUTTE
MONTANA
N. DAKOTA
FARGO
FORBES
ABERDEEN
S. DAKOTA
WATERTOWN
HURON
SIOUX FALLS
YANKTON
MINNEAPOLIS
ST. PAUL
WISC.
BILLINGS
PORTLAND
BONNEVILLE DAM
EUGENE
OREGON
KLAMATH FALLS
CALIF
TO SAN FRANCISCO, SAN JOSE AND SOUTH
BIEBER
GREAT NORTHERN RAILWAY
IOWA
SIOUX CITY
OMAHA
DES MOINES
DENVER
TO TEXAS AND GULF COAST
KANSAS CITY
ST. LOUIS
MILWAUKEE
CHICAGO
DETROIT
TOLEDO
CLEVELAND
PITTSBURGH
INDIANAPOLIS
CINCINNATI
LOUISVILLE
OTTAWA
MONTREAL
TORONTO
BUFFALO
BOSTON
NEW YORK
PHILADELPHIA
BALTIMORE
WASHINGTON
RICHMOND

STATION



**ONE OF THE RAREST PHOTOS** in this book is reproduced showing the William Crooks at Elk River, Minnesota in 1864. At the time it belonged to the First Division of the St. Paul & Pacific Railroad a predecessor of the Great Northern. The Wm. Crooks was the first locomotive in Minnesota and adjacent territory. Built by Smith & Jackson at Patterson, N.J. the little 4-4-0 was brought to St. Paul in 1861 on a Mississippi River steamboat, and named for the Chief Engineer of the St. Paul & Pacific Railroad, Colonel William Crooks. (Great Northern Railway)





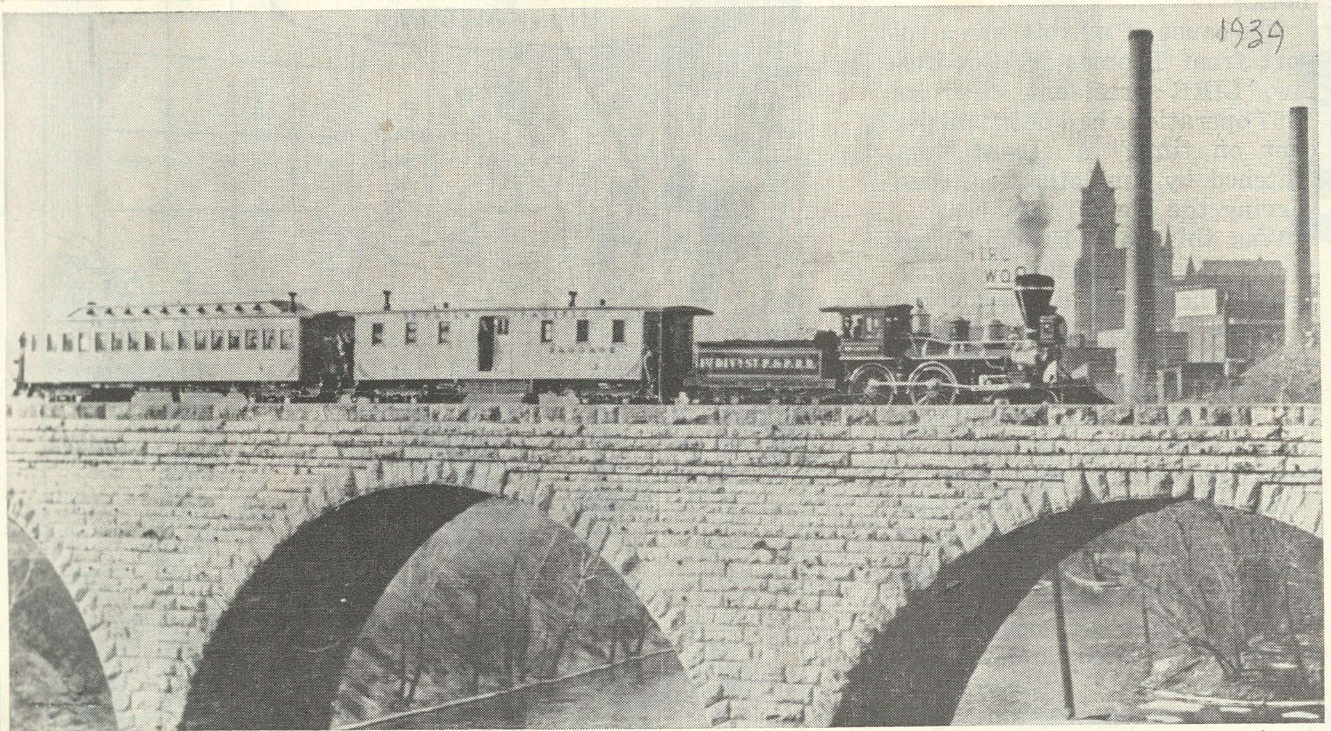
**THE WILLIAM CROOKS,** Great Northern's No. 1 locomotive, originally operated in 1862. It powered the first train operated in Minnesota. Its first tasks were performed for St. Paul and Pacific Railroad, a predecessor of the Great Northern system.

Vital statistics on this ancient locomotive: weight on drivers, 36,000 lbs; total weight 102,000 lbs., tractive power, 5,000 lbs., steam pressure, 120 lbs., capacity of tender, 2,500 gallons; over-all length, 51 feet. Present domicile: St. Paul Union Depot.

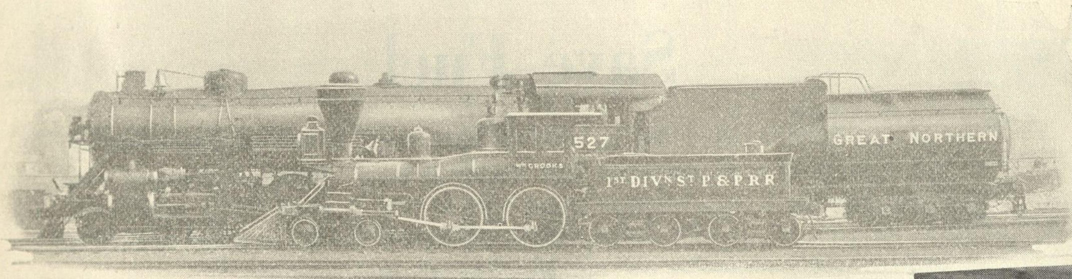
The William Crooks was the forerunner of a vast fleet of diesel locomotives that do almost 100% of Great Northern's work today. But this venerable wood-burner is still a shiny, well-kept remembrance of more romantic days of railroading on the line James J. Hill built from St. Paul to the Pacific.

**GREAT NORTHERN RAILWAY**

1939



The first locomotive in Minnesota and the Northwest, the William Crooks, is shown in a photo of 1861 vintage hauling a passenger train on a stone arch bridge spanning the Mississippi river at Minneapolis. Built in that year for the St. Paul & Pacific, now part of the Great Northern, the ancient woodburner went into regular service during the summer of 1862 between St. Paul and St. Anthony, now Minneapolis. The engine, retired many years ago, is now a museum piece displayed at the St. Paul union depot.

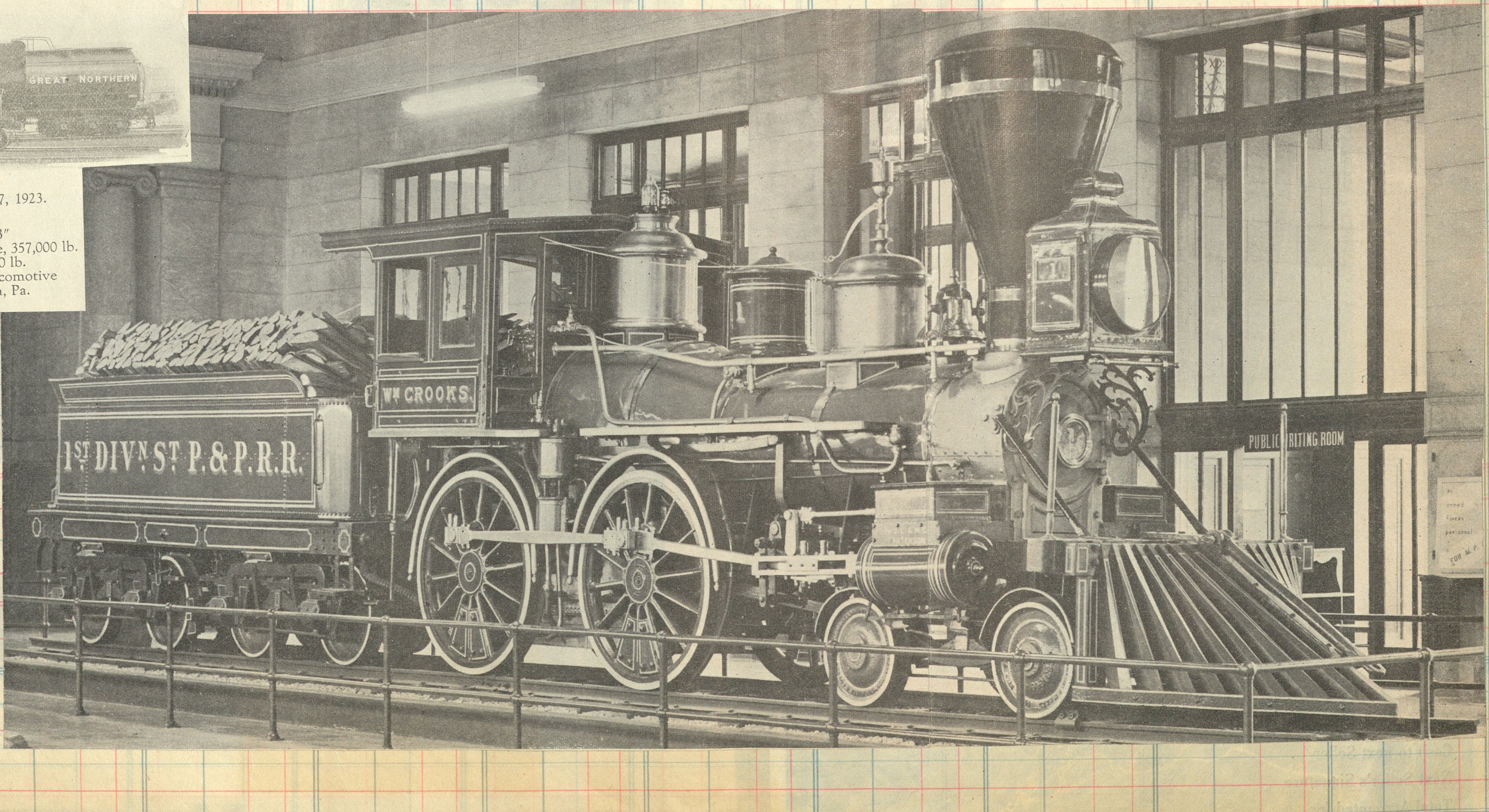


THE "WILLIAM CROOKS", 1861.

Cylinders, 12"x 22"
Drivers, diameter, 63"
Weight, total engine, 55,400 lb.
Tractive force, 5,130 lb.
Built by Smith & Jackson,
Paterson, N. J.

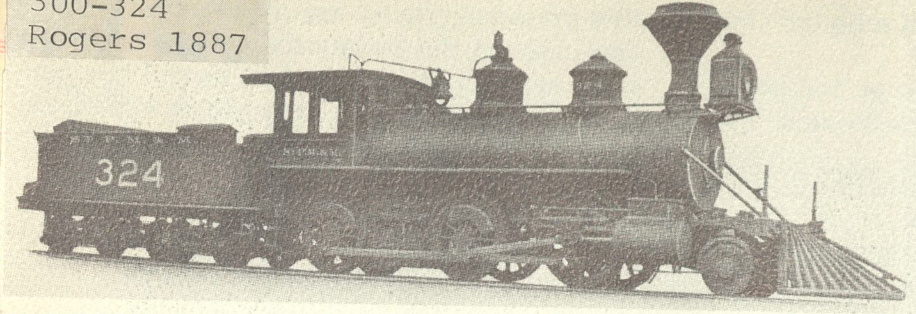
NUMBER 2,527, 1923.

Cylinders, 29" x 28"
Drivers, diameter, 73"
Weight, total engine, 357,000 lb.
Tractive force, 54,830 lb.
Built by Baldwin Locomotive
Works, Philadelphia, Pa.



132

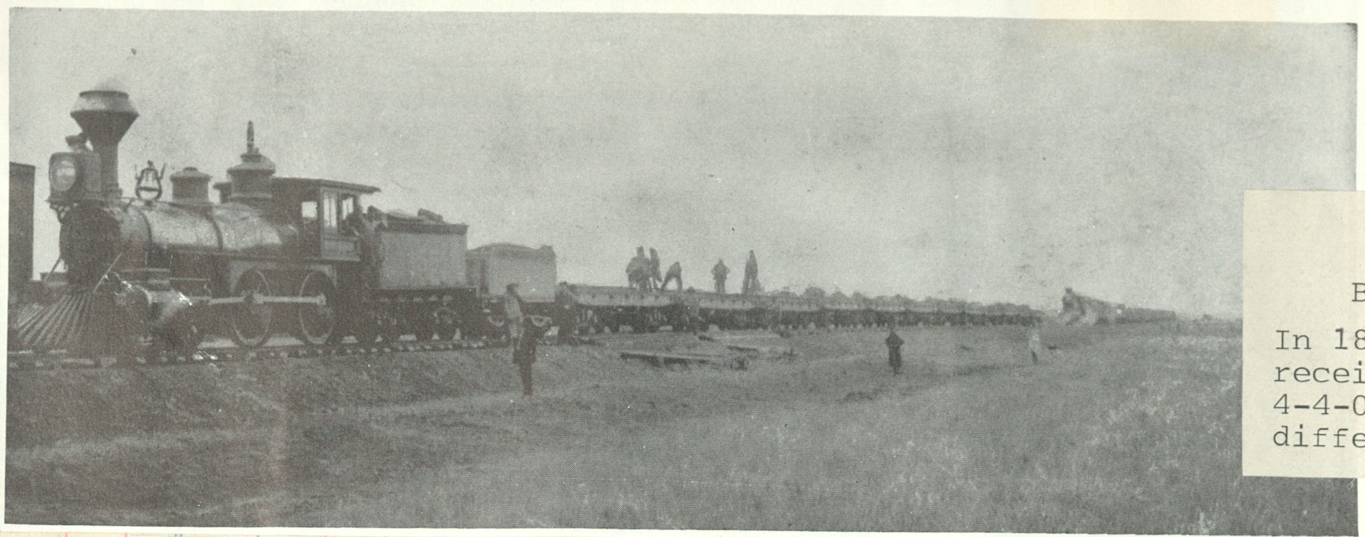
300-324
Rogers 1887



#324 c/n 3807
as StPM&M to
MC #6, GN 324

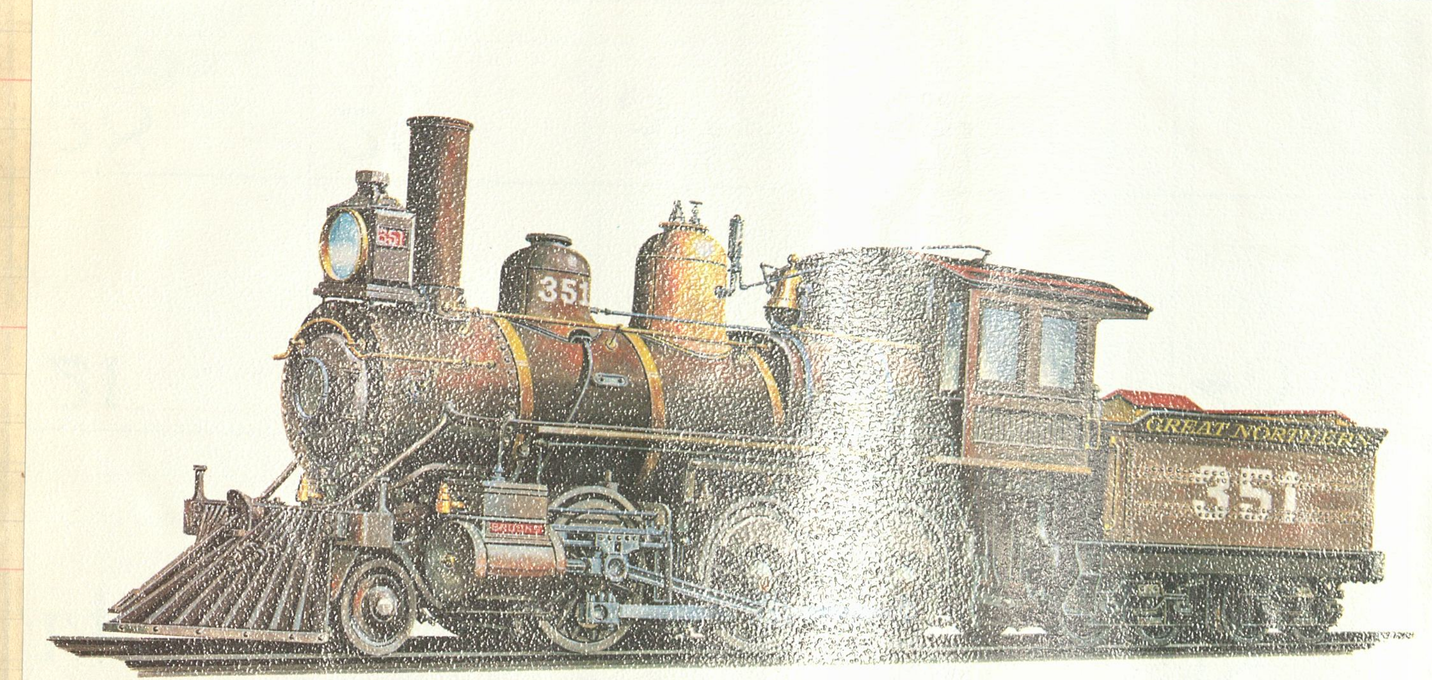
| | |
|---|---|
| Cylinders | 19″ x 24″ |
| Drivers, diam. | 55″ |
| Steam pressure | 140 lb. |
| Grate area | 18.9 sq. ft. |
| Heating surface | 1213 sq. ft. |
| Weight on drivers | 78,200 lb. |
| “ total engine | 99,800 lb. |
| Tractive force | 18,750 lb. |

**REACHING WEST,** a string of flat cars deliver rails to “the front” as the Hill road crosses the broad plains of Montana. Locomotive is No. 155 of the St. Paul Minneapolis & Manitoba Railway, and carries an auxiliary water tank coupled behind her tender. Note the blanketed Indians, watching, center foreground. (Courtesy of Historical Society of Montana)



StP M & M
150-171
Brooks 1882

In 1882 the StPM&M
received seventy one
4-4-0's from six
different builders



The 351 was part of the Brooks exhibit at the Chicago Columbian Exposition in 1893. Fifteen similiar engines, noed 351-365, were delivered to the G.N. that year. 351 was renoed 2nd 400 c/n 2266

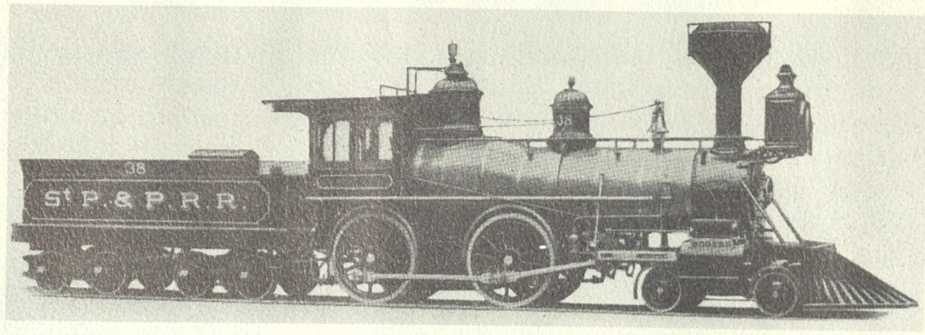


Photo furnished by American Locomotive Co.

**American Type Locomotive, Built by the Rogers Locomotive Works, 1878**

| | | | |
|---|---|---|---|
| Cylinders | 16″ x 24″ | Weight on drivers | 47,600 lb. |
| Drivers diam. | 57⅝″ | Weight, total engine | 75,600 lb. |

StPaul & Pacific 38
"G W Turner"
c/n 2492
to StPM&M #38
retired 1896

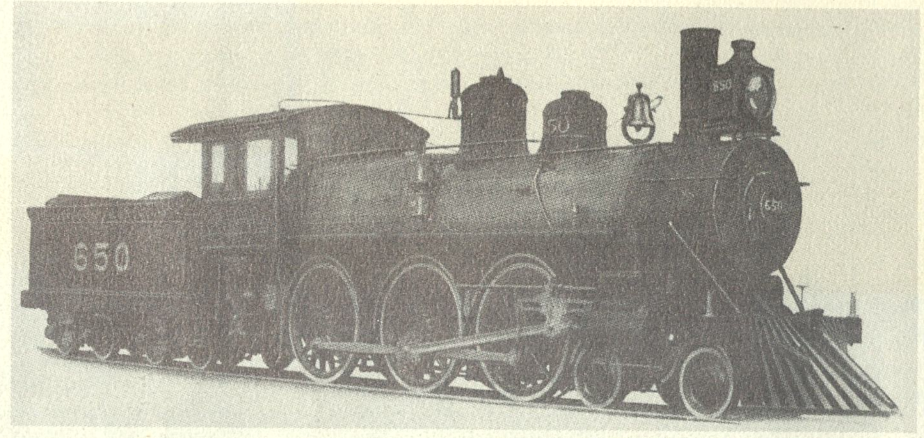


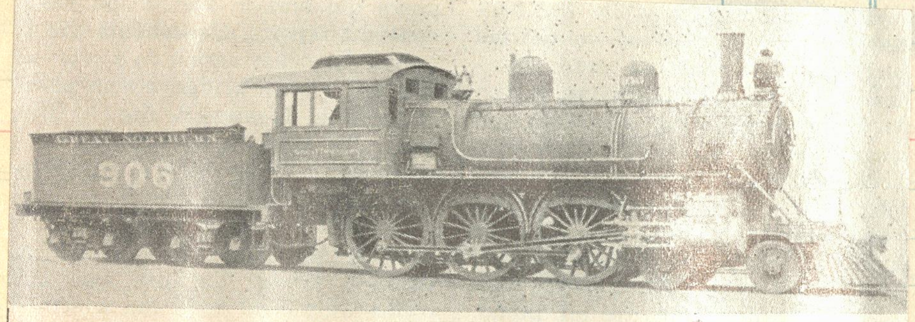
Photo furnished by American Locomotive Co.

**Ten-wheeled Locomotive, Class E-7, Built by the Brooks Locomotive Works, 1893**

650-669
Renoed 950-969
c/n 2267

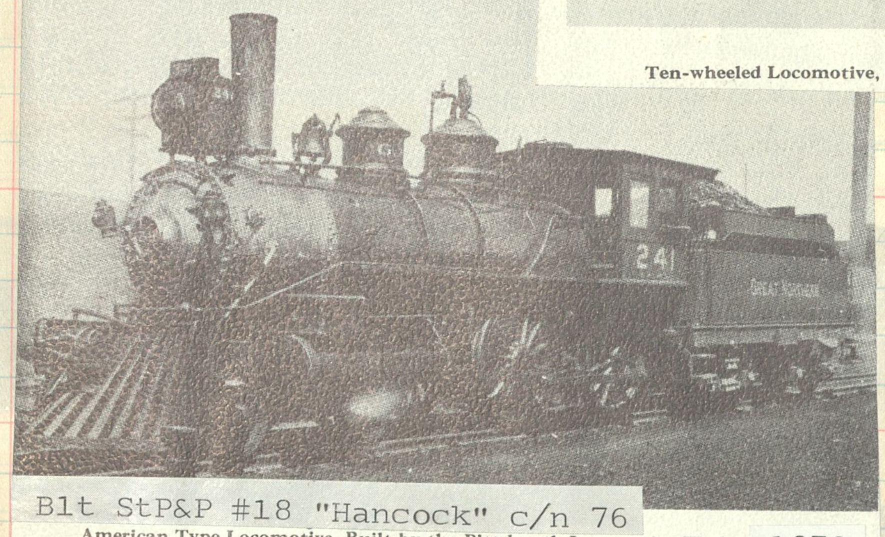
| | |
|---|---|
| Cylinders | 19″ x 26″ |
| Drivers, diam. | 73″ |
| Steam pressure | 160 lb. |
| Grate area | 24.6 sq. ft. |
| Heating surface | 1786 sq. ft. |
| Weight on drivers | 110,000 lb. |
| “ total engine | 138,000 lb. |
| Tractive force | 17,480 lb. |

Class E-7 originally carried 180 lb. pressure and developed a tractive force of 19,700 lb.



900-906

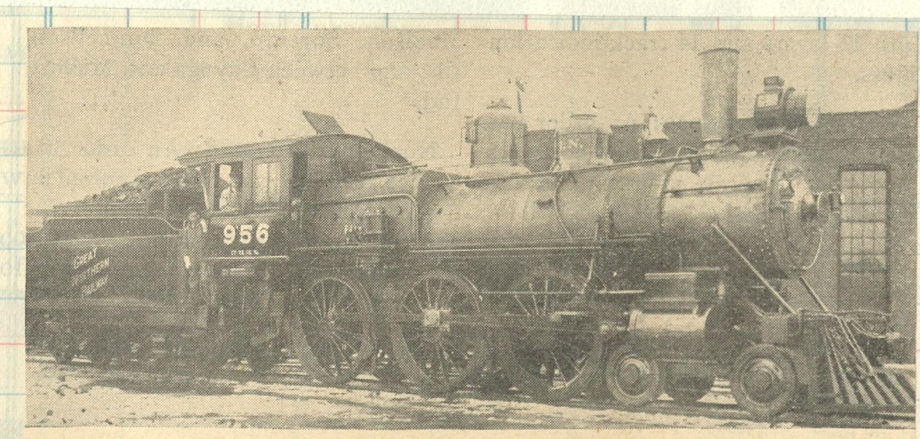
No. 906 is a sister of the 905, the Rogers Ten-Wheeler which “had made a phenomenal run . . . the 197-mile run from Leavenworth to Spokane in four hours flat — a run that was talked about for years.” Nos. 905 and 906 were in a batch of 10 locomotives shipped to the Great Northern in the fall of 1899, just in time for 905 to draw the assignment to help catch up with the mail train in the accompanying story. They had 73-inch drivers to give them speed, and 210 pounds steam pressure working on 18 x 26-inch pistons to give them 18,150 pounds tractive force. They were classified as E-3’s.



Blt StP&P #18 "Hancock" c/n 76

**American Type Locomotive, Built by the Pittsburgh Locomotive Works,** 1870

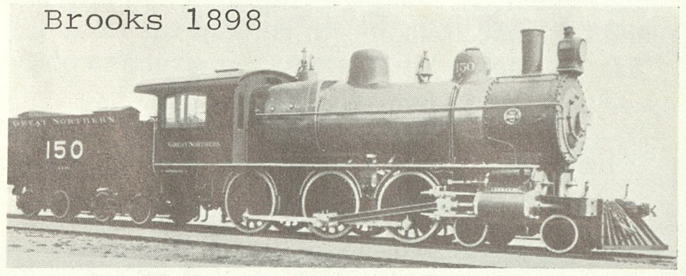
| | | | |
|---|---|---|---|
| Cylinders | 16″ x 24″ | Weight on drivers | 43,700 lb. |
| Drivers, diam. | 63″ | Weight, total engine | 66,100 lb. |

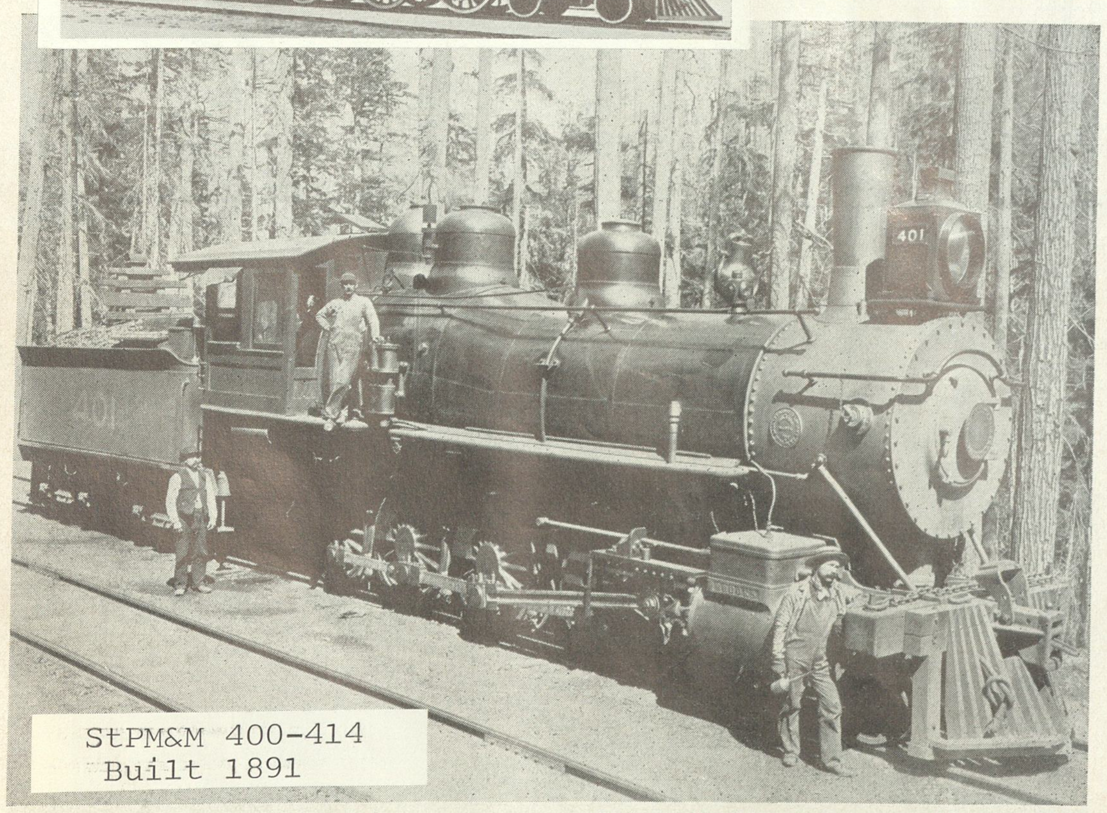


GREAT NORTHERN ENGINE 956 AT ST. PAUL IN APRIL, 1913

The engine was about to leave Jackson Street Roundhouse to take President Gray on an inspection tour of the line when the photo was made. Brother M. J. Maloney, Div. 150, is in the cab with Brother Paul Overgaard, Div. 549, then a fireman, in the gangway. Picture is the property of Brother Overgaard.

Brooks 1898



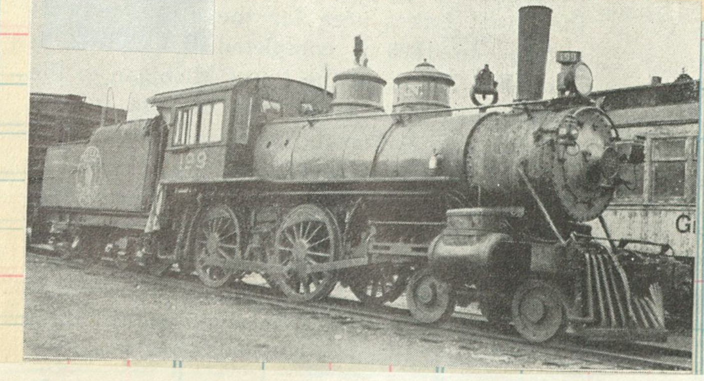


StPM&M 400-414
Built 1891

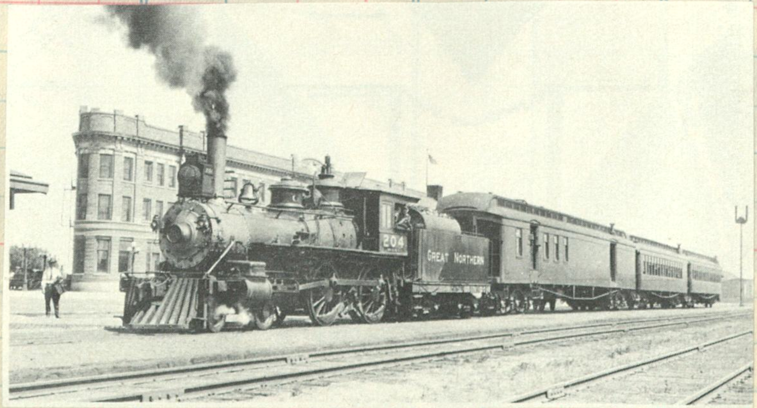
Collection of Albert Farrow, 138 10th St., S., Auburn, Wash.

**Mr. Dulmage's Twelve-Wheeler looked like this.**

The 400 series engines in the nineties were these Brooks-built 4-8-0's with big fire boxes, 20″ x 26″ cylinders working at 180 pounds pressure, driving 55″ wheels under a 156,000-pound engine. This combination developed a tractive force of 25,720 pounds with which to pull the cars. The engines were rebuilt with Belpaire fire boxes, renumbered in the 600's and are now Class G-1 while they last. This picture was taken in Washington in the late nineties and is now part of the collection of Albert Farrow of Auburn, Wash. Notice the link and pin coupler with a pushing device that could be swung over the pocket. A neat knot has been tied in the air hose to keep it from dragging between the rails.



Blt by R.I. 1882 [c/n 1296] as StPM&M #2nd 199. To S&M 199, GN 199. Rec'd new boiler 1917. Retired 1940



4/10

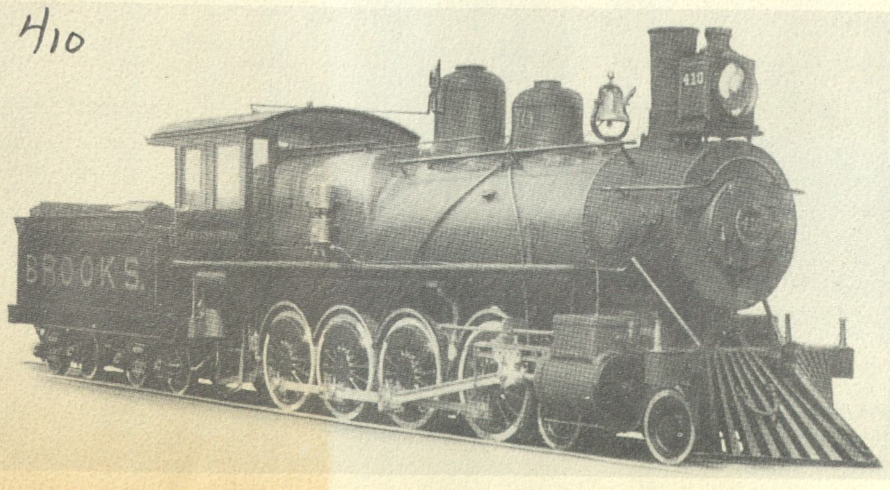


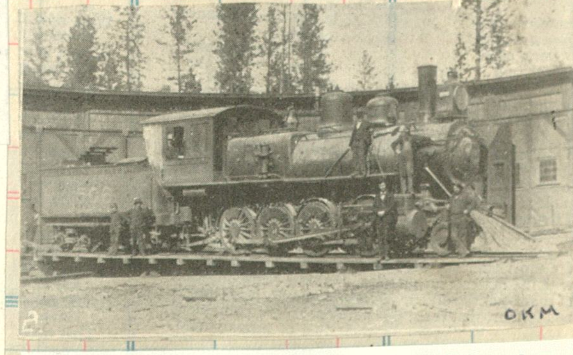
Photo furnished by American Locomotive Co

**Twelve-wheeled Locomotive, Class G-1, Built by the Brooks Locomotive Works, 1893**

2nd #410 blt in 1893 as exhibit at Columbian Exposition. Renoed #610 c/n 2261

| | |
|---|---|
| Cylinders | 20″ x 26″ |
| Drivers, diam. | 55″ |
| Steam pressure | 160 lb. |
| Grate area | 24.6 sq. ft. |
| Heating surface | 2208 sq. ft. |
| Weight on drivers | 132,000 lb. |
| “ total engine | 156,000 lb. |
| Tractive force | 25,720 lb. |

Class G-1 originally carried 180 lb. pressure and developed a tractive force of 28,900 lb.

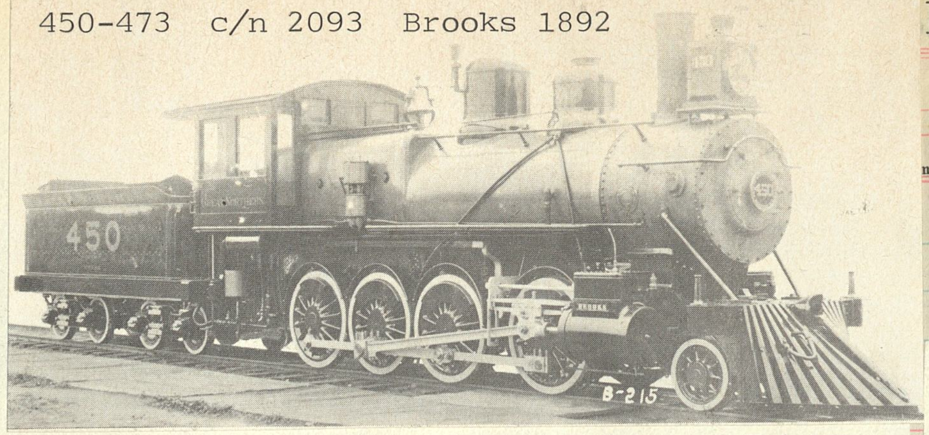


OKM

#506, a 2-8-0 blt by Brooks 1892 c/n 2193 [500-514]

Clos. No. | Sold | Amount | Clos. No. | Sold

450-473  c/n 2093  Brooks 1892

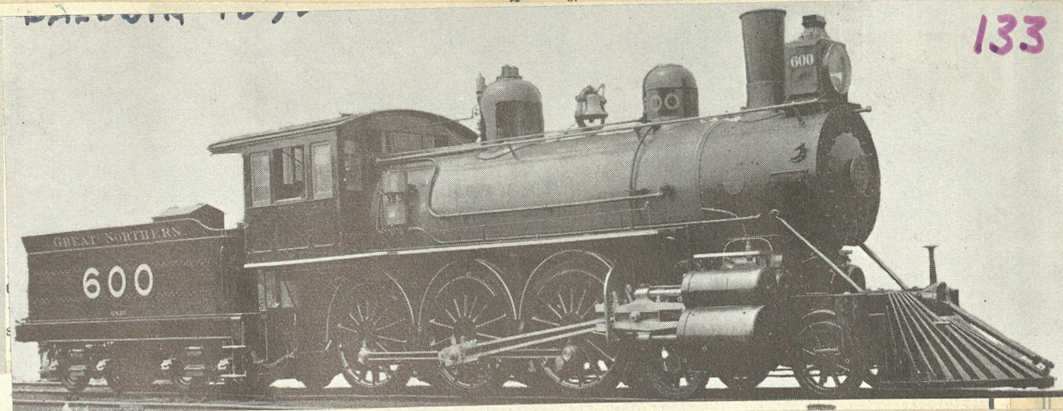


|  |  |
|---|---|
| Cylinders | 19″ x 26″ |
| Drivers, diam. | 55″ |
| Steam pressure | 160 lb. |
| Grate area | 24.6 sq. ft. |
| Heating surface | 1586 sq. ft. |
| Weight on drivers | 120,000 lb. |
| " total engine | 136,000 lb. |
| Tractive force | 23,210 lb. |

Class F-1 originally carried 180 lb. pressure and developed a tractive force of 26,460 lb.

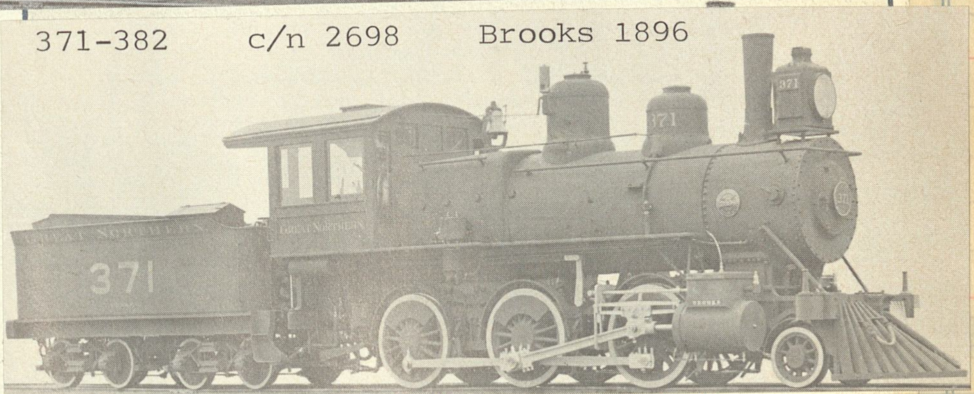
Consolidation Type Locomotive, Class F-1, Built by the Brooks Locomotive Works, 1892

600-601
Compounds
BLW 1892
c/n 12779
Nos EM 600
EM 998
GN 998



371-382

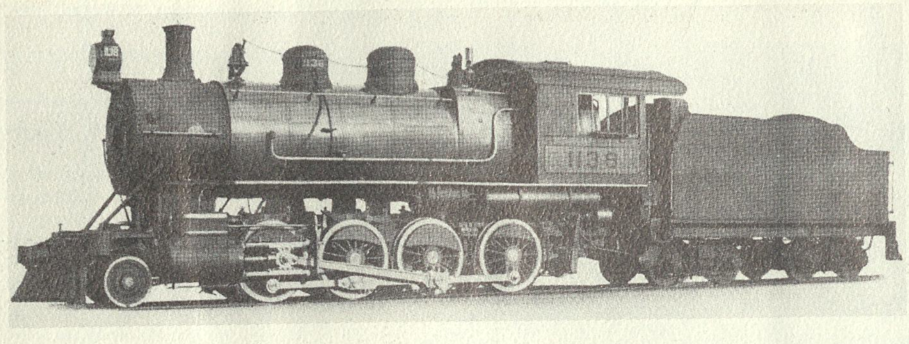
371-382  c/n 2698  Brooks 1896



|  |  |
|---|---|
| Cylinders | 19″ x 26″ |
| Drivers, diam. | 55″ |
| Steam pressure | 170 lb. |
| Grate area | 21.1 sq. ft. |
| Heating surface | 1587 sq. ft. |
| Weight on drivers | 114,000 lb. |
| " total engine | 130,000 lb. |
| Tractive force | 24,660 lb. |

Class D-5 originally carried 180 lb. pressure and developed a tractive force of 26,100 lb. It was generally similar to Class D-4, built in 1893, but had a longer piston stroke and larger boiler.

RENOED #450



1130-1139
c/n 2744

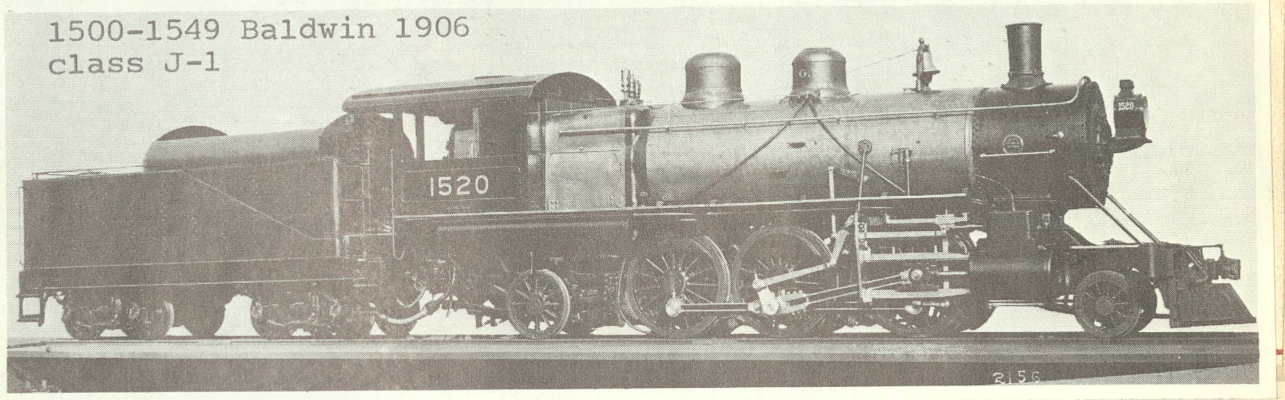
|  |  |
|---|---|
| Cylinders | 20″ x 32″ |
| Drivers, diam. | 55″ |
| Steam pressure | 210 lb. |
| Grate area | 35.6 sq. ft. |
| Heating surface | 2717 sq. ft. |
| Weight on drivers | 174,000 lb. |
| " total engine | 194,000 lb. |
| Tractive force | 41,540 lb. |

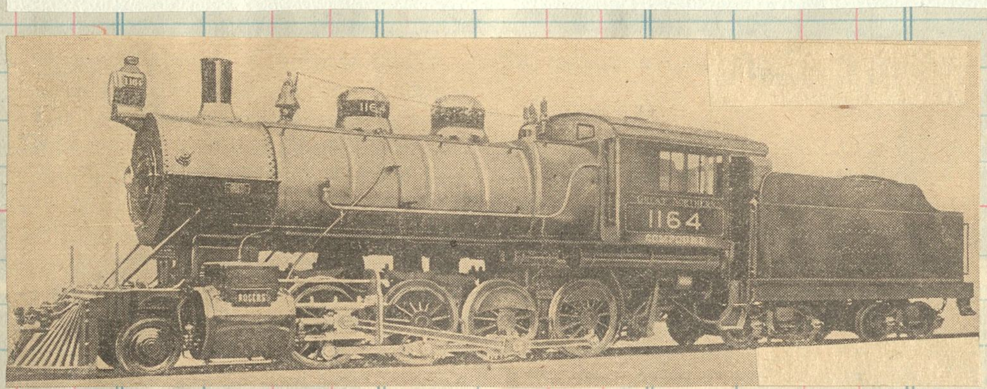
*Photo furnished by American Locomotive Co.*

Consolidation Type Locomotive, Class F-7, Built by the American Locomotive Co. (Cooke Works), 1901

CN 2744

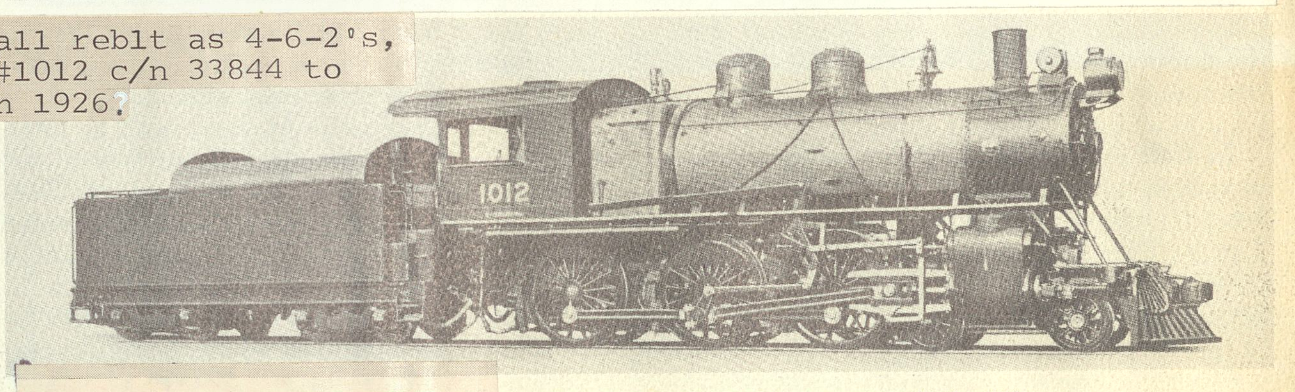
1500-1549 Baldwin 1906
class J-1





1155-1169
c/n 5808
Rogers 1902

1008-1032, all reblt as 4-6-2's, class H-5. #1012 c/n 33844 to H-5 #1365 in 1926.



Ten-wheeled Locomotive, Class E-14, Built by The Baldwin Locomotive Works, 1909

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| Cylinders | 23½″ x 30″ | Tubes, number | 5″, 26; 2¼″, 180 | Wheel base, driving | 15′ 3″ | Weight, total engine | 200,000 lb. |
| Drivers, diam. | 73″ | " length | 16′ 6″ | " " total engine | 27′ 2½″ | " " " and tender | 348,000 lb. |
| Boiler, diam. | 72″ | Grate area | 49.5 sq. ft. | " " " " and tender | 59′ 10¼″ | Tank capacity | 8000 U. S. gal. |
| Steam pressure | 200 lb. | Water heating surface | 2461 sq. ft. | Weight on drivers | 150,000 lb. | Fuel " | 13 tons |
| Firebox | 108″ x 66¼″ | Superheating surface | 445 sq. ft. |  |  | Tractive force | 38,580 lb. |
| Tubes, diam. | 5″ & 2¼″ |  |  |  |  |  |  |

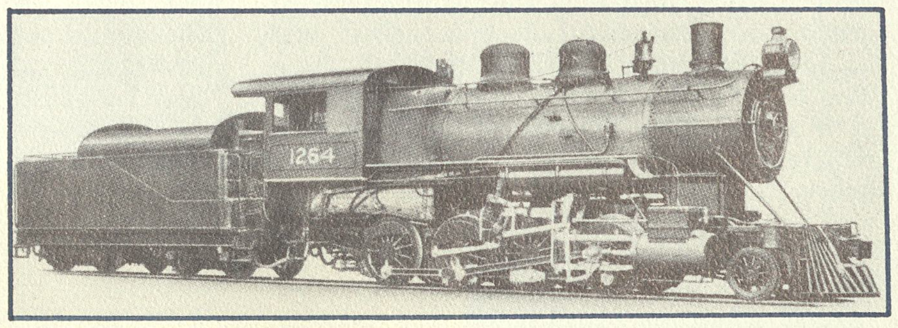
Originally built with 26″ x 30″ cylinders and a working pressure of 150 lb.

Fifty, 1215-1264, blt by Baldwin 1907. Nos 1255-1264 tfr to SP&S in 1909 noed 355-364. #1264 noed SP&S 363.  c/n 32519

1215-1264

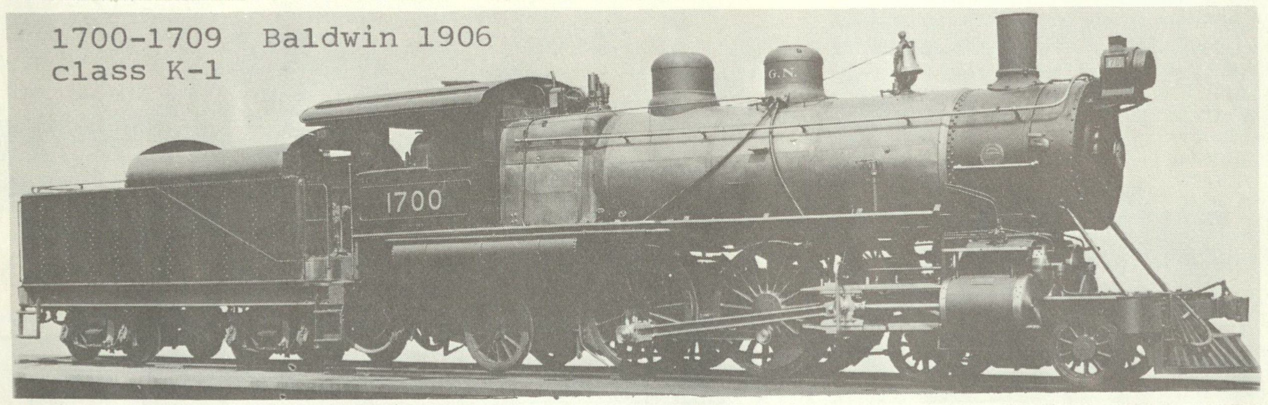
|  |  |
|---|---|
| Cylinders | 20″ x 32″ |
| Drivers, diam. | 55″ |
| Steam pressure | 210 lb. |
| Grate area | 59.2 sq. ft. |
| Heating surface | 2719 sq. ft. |
| Weight on drivers | 180,000 lb. |
| " total engine | 195,000 lb. |
| Tractive force | 41,540 lb. |

1264 to SP&S 363 in 1909



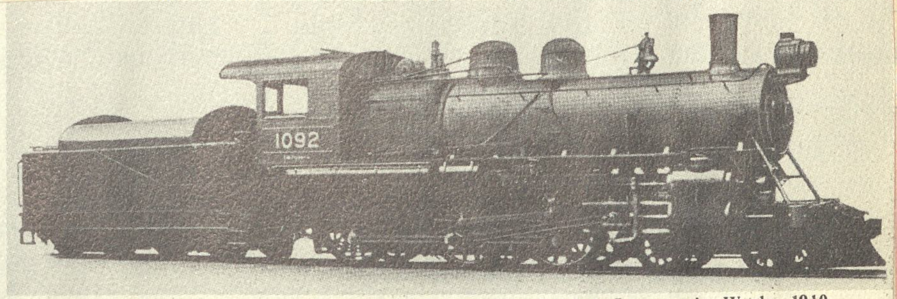
Consolidation Type Locomotive, Class F-8, Built by The Baldwin Locomotive Works, 1908

1700-1709  Baldwin 1906
class K-1

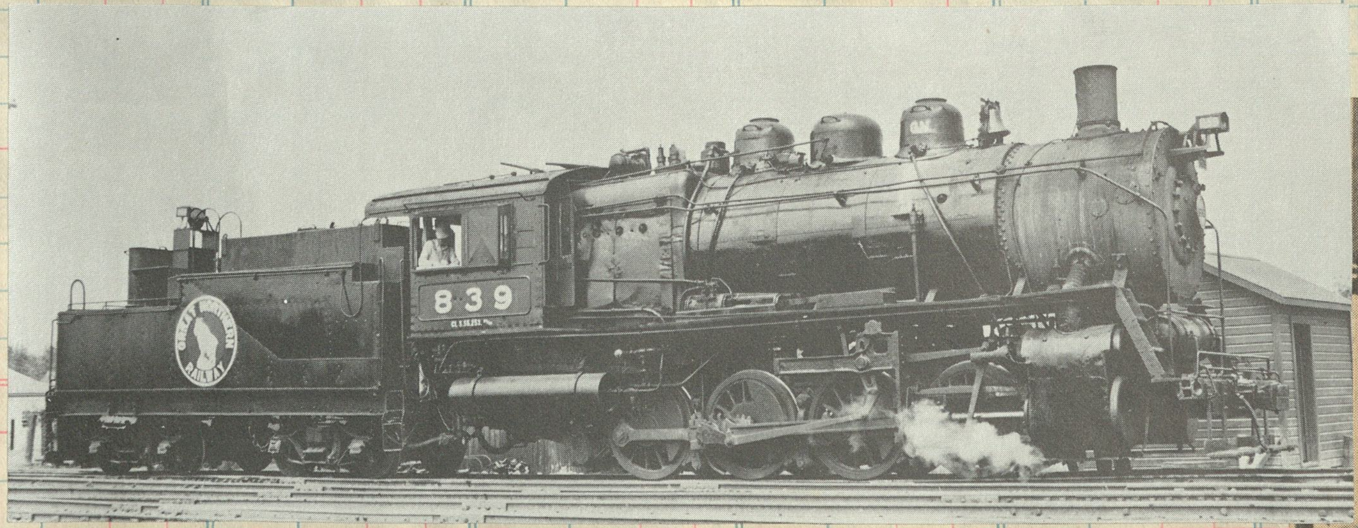


|  |  |
|---|---|
| Cylinders | 22″ x 28″ |
| Drivers, diam. | 73″ |
| Steam pressure | 200 lb. |
| Grate area | 33.5 sq. ft. |
| Water heating surface | 2525 sq. ft. |
| Superheating surface | 430 sq. ft. |
| Weight on drivers | 134,000 lb. |
| " total engine | 177,000 lb. |
| Tractive force | 31,560 lb. |

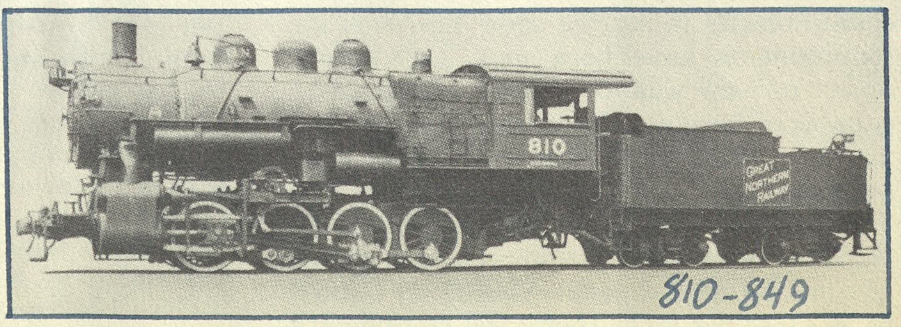
1073-1092



Ten-Wheeled Locomotive, Class E-15, Built by The Baldwin Locomotive Works, 1910



|  |  |
|---|---|
| Cylinders | 26″ x 28″ |
| Drivers, diam. | 55″ |
| Steam pressure | 200 lb. |
| Grate area | 59.2 sq. ft. |
| Water heating surface | 2812 sq. ft. |
| Superheating surface | 595 sq. ft. |
| Weight, total engine | 232,600 lb. |
| Tractive force | 58,500 lb |



810-849

Eight-coupled Switching Locomotive, Class C-1, Built by The Baldwin Locomotive Works, 1918

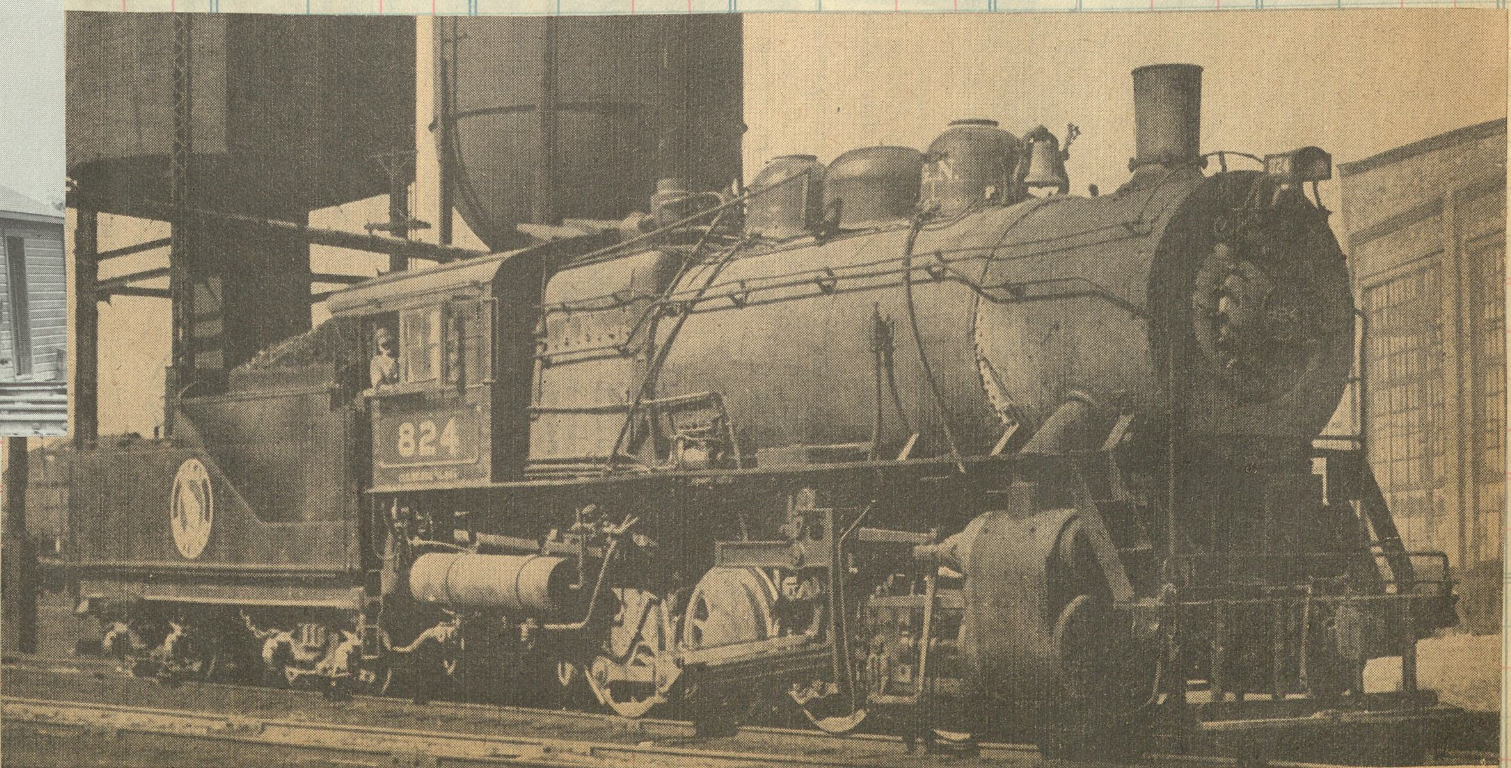


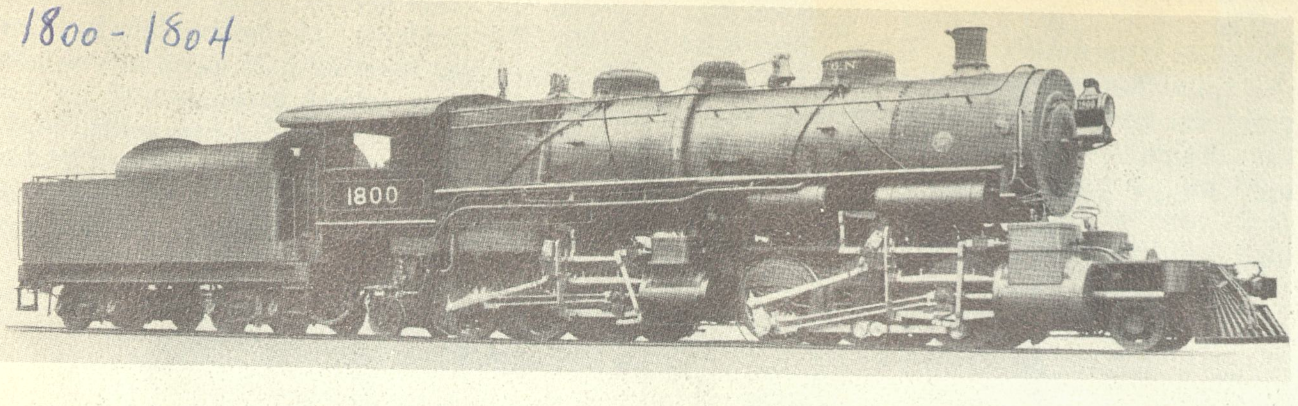
*Photo by H. W. Pontin, Rail Photo Service, 93 Massachusetts Ave., Boston 15, Mass*

**DESIGNED** for heavy switching and transfer work: Great Northern's No. 824, Class C-1, at Great Falls, Mont.

Clos. No.

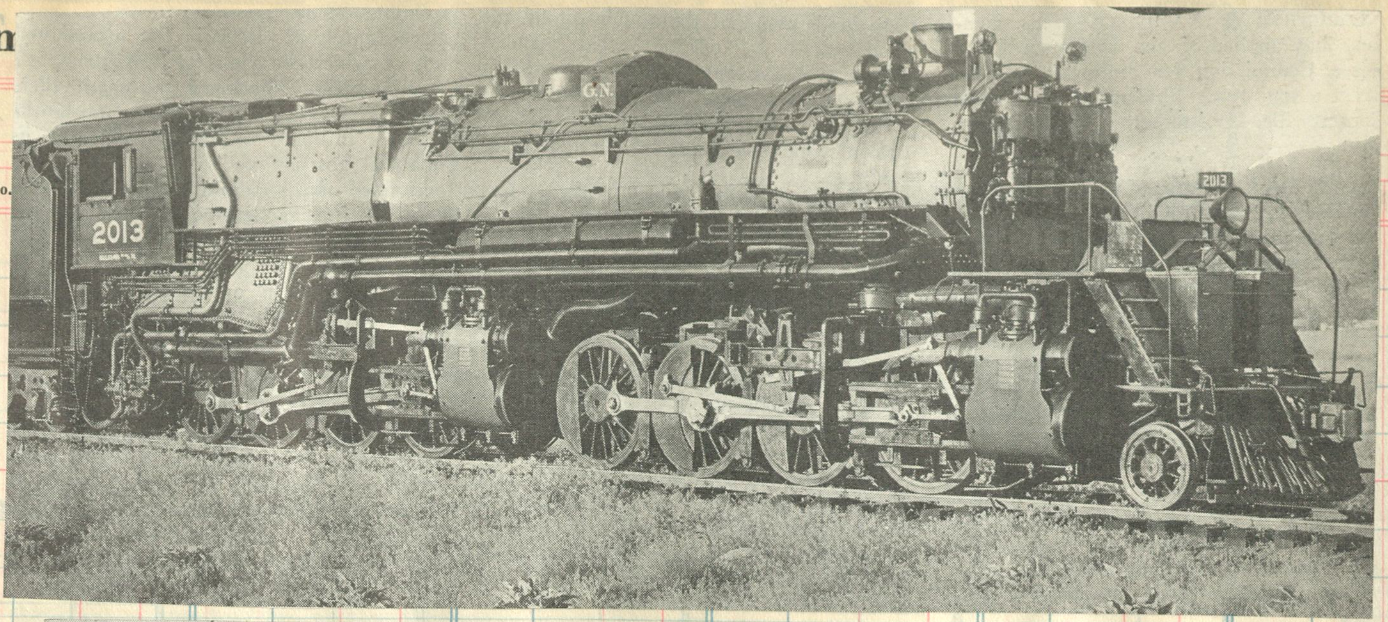
Amount Clos. No. Sold Amount

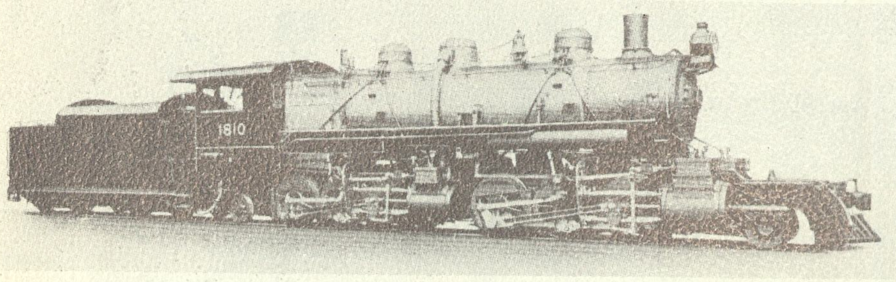
1800-1804



Mallet Articulated Compound Locomotive, Class L-1, Built by The Baldwin Locomotive Works, 1906

| | |
|---|---|
| Cylinders | 21½″ & 33″ x 32″ |
| Drivers, diam. | 55″ |
| Boiler, diam. | 84″ |
| Steam pressure | 200 lb. |
| Firebox | 117″ x 96″ |
| Tubes, diam. | 2¼″ |
| " number | 437 |
| " length | 21′ 0″ |
| Grate area | 78 sq. ft. |
| Heating surface | 5609 sq. ft. |
| Wheel base, driving (each group) | 10′ 0″ |
| Wheel base, total engine | 44′ 10″ |
| " " " " and tender | 73′ 2¼″ |
| Weight on drivers | 316,000 lb. |
| Weight, total engine | 355,000 lb. |
| " " " and tender | 503,000 lb. |
| Tank capacity | 8000 U. S. gal. |
| Fuel " | 13 tons |
| Tractive force | 69,900 lb. |



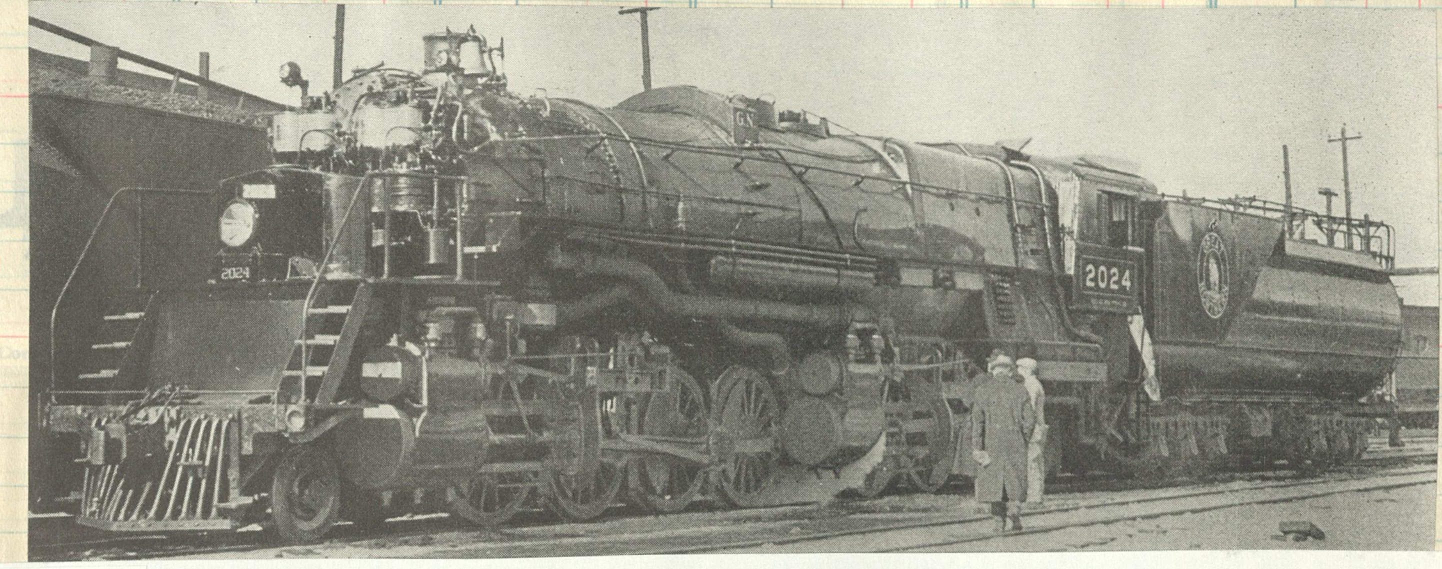


| | |
|---|---|
| Cylinders | 20″ & 31″ x 30″ |
| Drivers, diam. | 55″ |
| Steam pressure | 200 lb. |
| Grate area | 53.4 sq. ft. |
| Heating surface | 3914 sq. ft. |
| Weight on drivers | 250,000 lb. |
| " total engine | 288,000 lb. |
| Tractive force | 54,520 lb. |

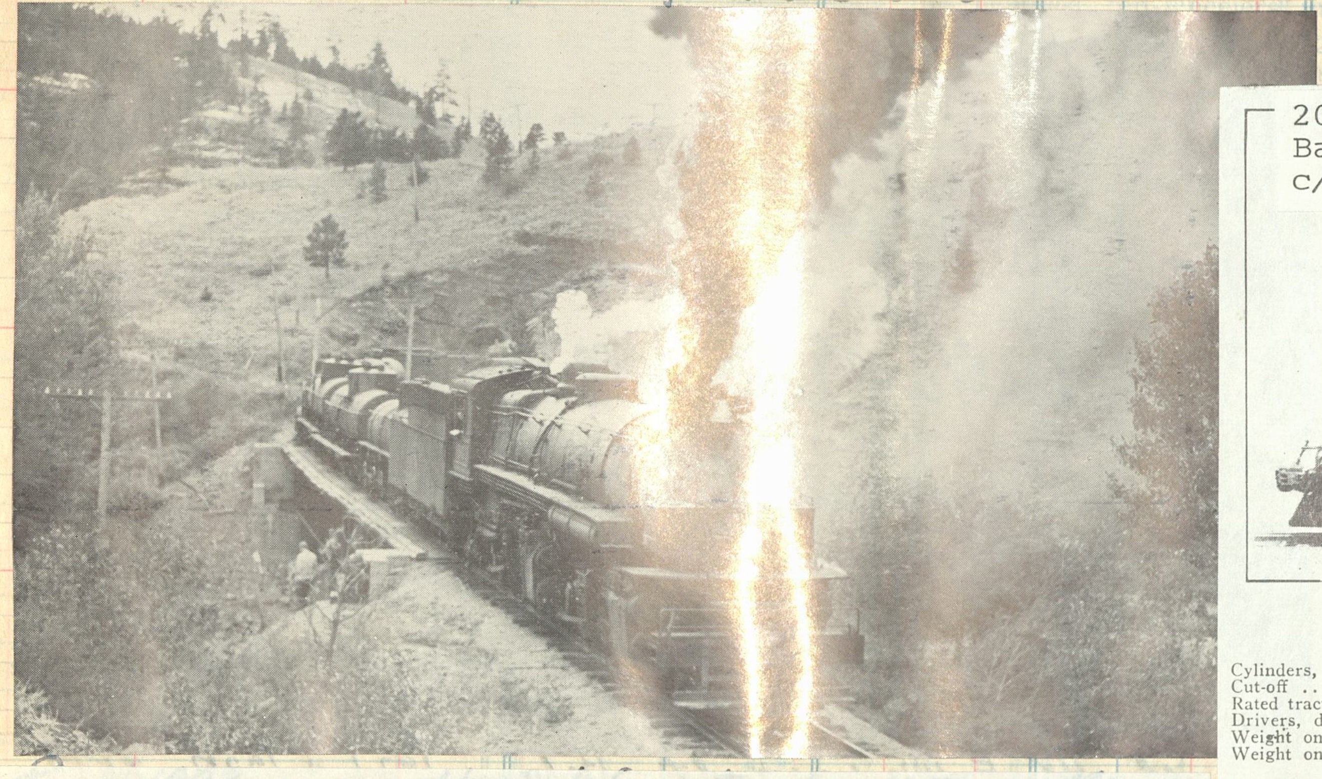
Mallet Articulated Compound Locomotive, Class L-2, Built by The Baldwin Locomotive Works, 1907

1805-1829

All rebuilt 1922-1924 into 2-8-2's of O-5 class



Blt by Baldwin
1912 c/n 38416
[2000-2024]
All rebuilt at
Superior 1924-27



The 1973, a 2-6-8-0, works on the Stuben grade between Butte and Great Falls. Nos 1960-1984 blt by Baldwin 1910. All rebuilt 1924-26

2030-2033
Baldwin 1925
c/n 58481

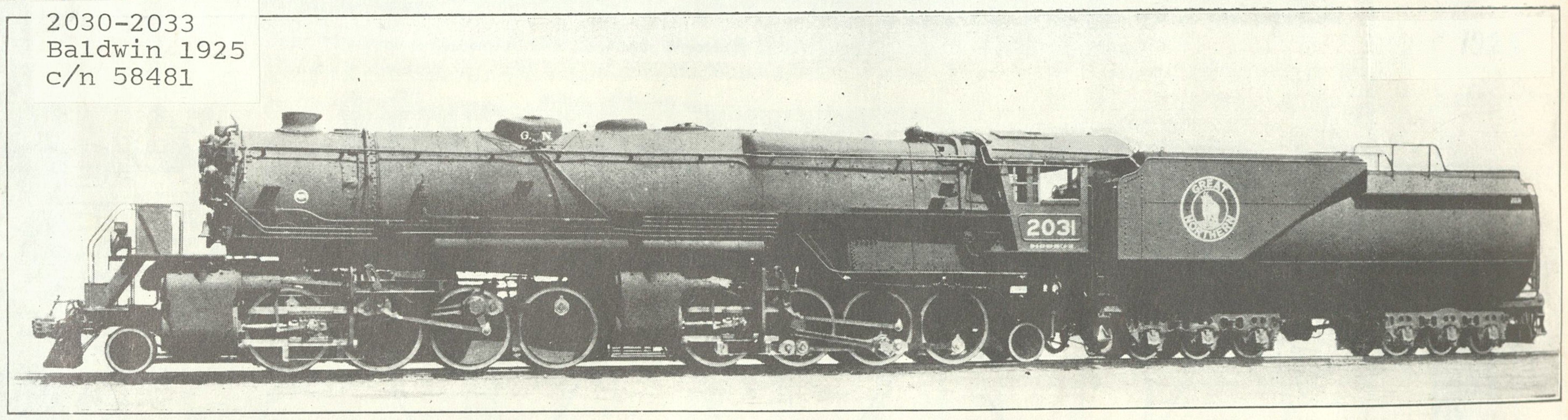
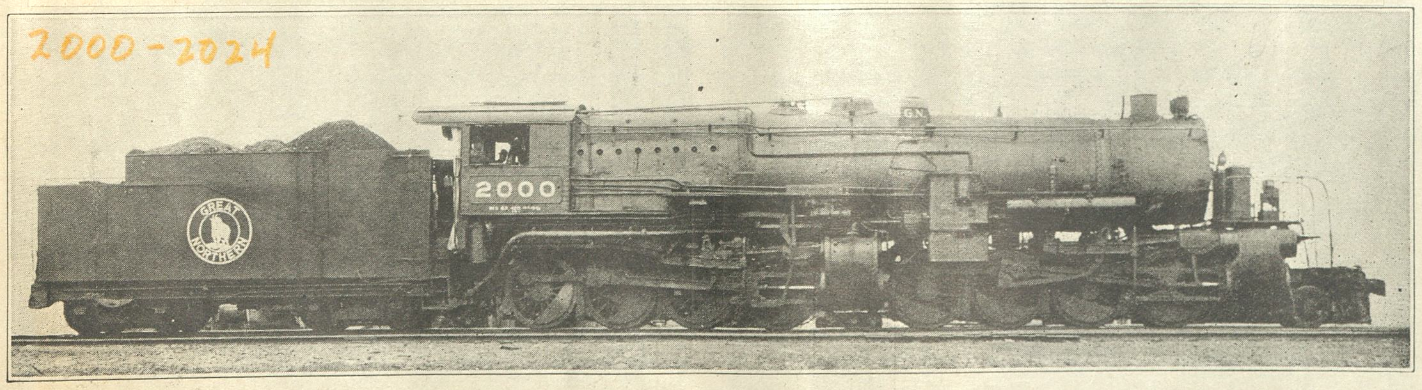


Fig. 156—Great Northern 2-8-8-2 Single-Expansion Articulated Locomotive, Class R 1s, for Freight Service. Built by The Baldwin Locomotive Works.
(*See also Fig.* 158)

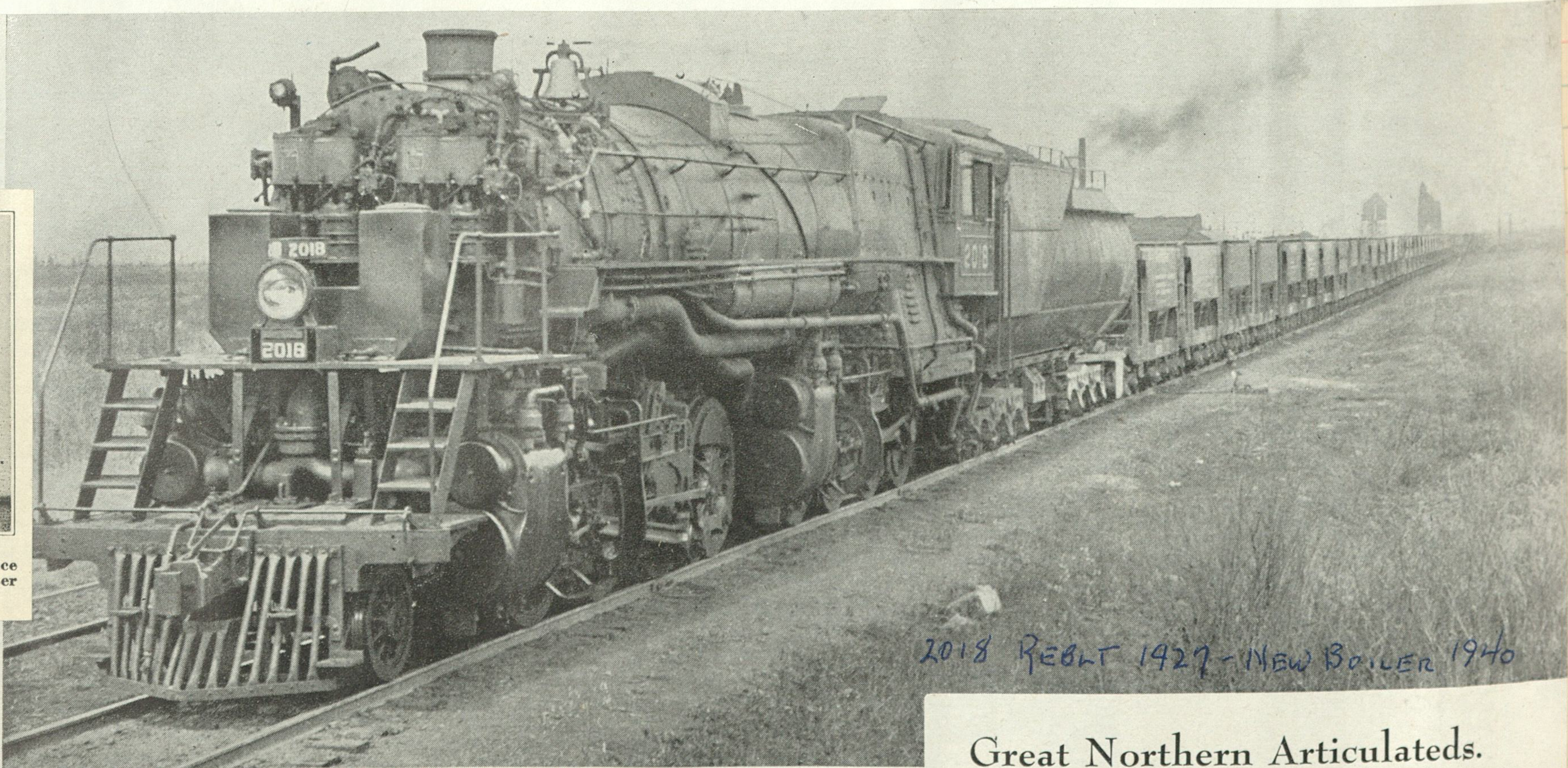
| | |
|---|---|
| Cylinders, diameter and stroke | 4-28 in. x 32 in. |
| Cut-off | 65 per cent |
| Rated tractive force | 127,500 lb. |
| Drivers, diameter | 63 in. |
| Weight on drivers | 532,800 lb. |
| Weight on front truck | 37,550 lb. |
| Weight on trailing truck | 24,590 lb. |
| Total weight of engine | 594,940 lb. |
| Weight of tender | 321,600 lb. |
| Driving wheel base | 16 ft. 6 in. and 16 ft. 6 in. |
| Total engine wheel base | 58 ft. 2 in. |
| Fuel | Oil |
| Firebox, length and width | 144 in. x 108 in. |
| Grate area | 108 sq. ft. |
| Steam pressure | 210 lb. |
| Evaporative heating surface | 7,142 sq. ft. |
| Superheating surface | 1,896 sq. ft. |
| Tender capacity | 16,000 gal. water, 5,800 gal. oil |

The 2000 shown as reblt at Superior 1925, rec'd new boiler 1941

2000-2024



Great Northern R. R. 2-8-8-0 Mallet Type Compound Locomotive Recently Converted by the Road into a Simple Articulated Engine. Performance Records Since the Conversion Indicate that the Locomotive is Performing Very Satisfactorily. Notice that the Worthington Feed Water Heater is Located on the Right Side of the Locomotive Which is Unusual.



2018 REBLT 1927 - NEW BOILER 1940

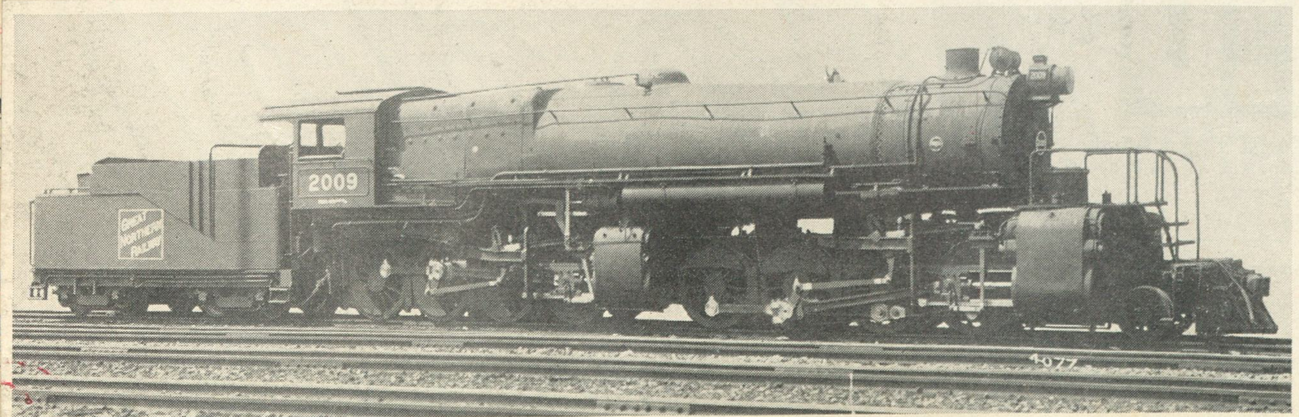
W. R. McGee, U. S. Army. Cover and center photo by S. B. Hertz, 4229 Sunnyside Ave., Seattle 3, Wash.

| Class | M-2 | N-3 | R-1 | R-2 | Z-6 |
|---|---|---|---|---|---|
| Type | 2-6-8-0 | 2-8-8-0 | 2-8-8-2 | 2-8-8-2 | 4-6-6-4 |
| Road numbers (M-2 not consecutive) | 1951-1984 | 2000-2024 | 2030-2043 | 2044-2059 | 4000-4001 |
| Tractive force, pounds | 95,000 | 108,400 | 137,088* | 146,000 | 104,500 |
| Cylinder diameter and stroke, inches | 22 x 32 front<br>23½ x 32 rear | 4-22 x 32 | 4-28 x 32 | 4-28 x 32 | 4-23 x 32 |
| Driver diameter, inches | 55 | 63 | 63 | 63 | 69 |
| Weight on drivers, pounds | 384,000 | 459,200 | 532,800 | 544,000 | 436,000 |
| Weight of engine, pounds | 403,000 | 489,200 | 594,940 | 630,750 | 621,000 |
| Weight of engine and tender, pounds | 588,100 | 863,700 | 919,440† | 1,003,530 | 1,004,800 |
| Steam pressure, pounds | 210 | 275 | 225‡ | 240 | 250 |
| Grate area, square feet | 78 | 95 | 108 | 126 | 152 |
| Evaporative heating surface, square feet | 5240 | 5782 | 7161‖ | 7947 | 5832 |
| Tender capacity: Gallons of water | 10,000 | 21.500 | 17,000§ | 22,000 | 20,000 |
| Tons of coal or gallons of oil | 15 | 5700¶ | 5800 | 5800 | 6000 |

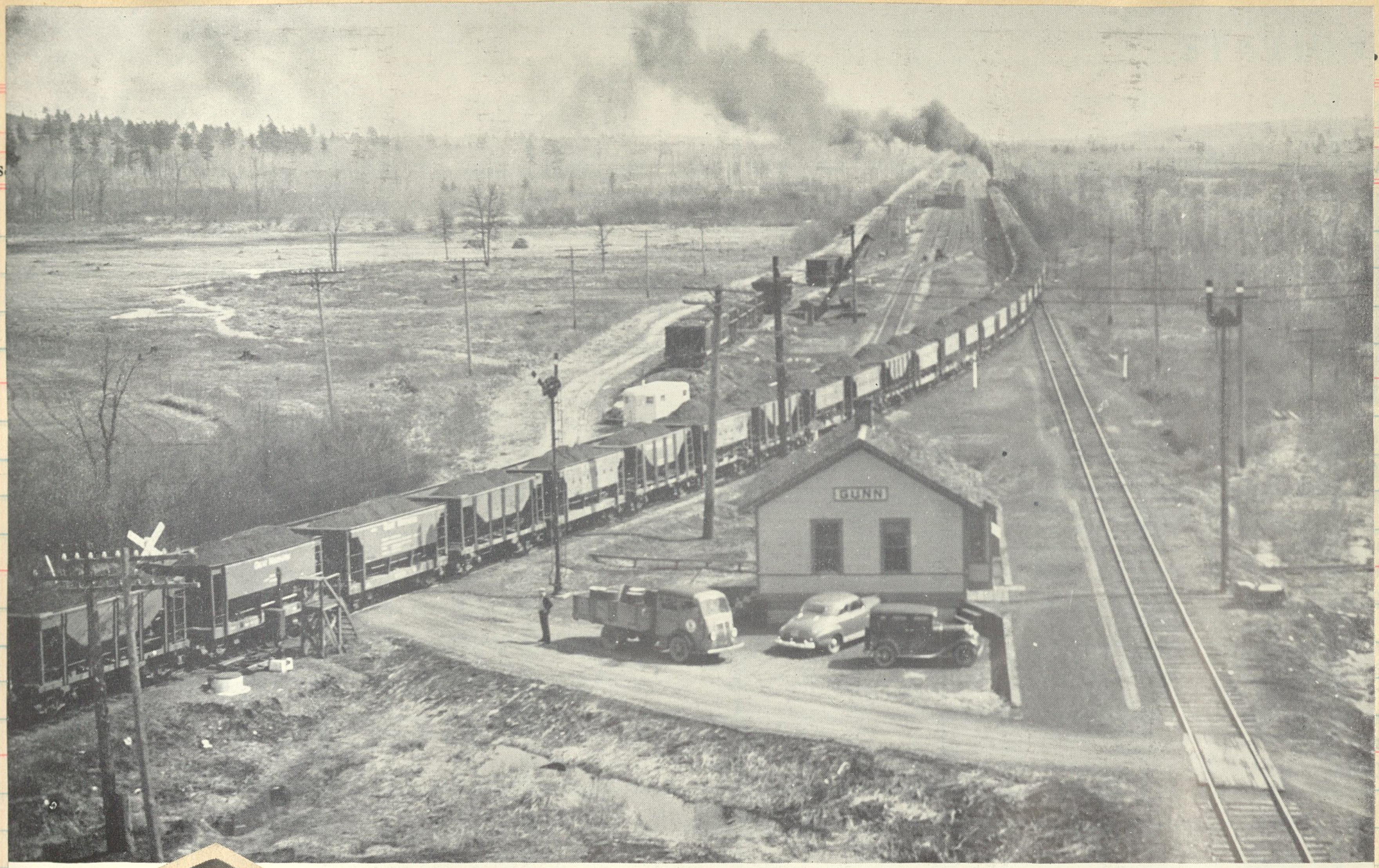
* Nos. 2030-2033, 128,400 lbs.
† Nos. 2035 and 2038, 921,500 lbs. Nos. 2040-2043, 967,720 lbs.
‡ Nos. 2030-2033, 210 lbs.
‖ Nos. 2030-2033, 6963 sq. ft.
§ Nos. 2035 and 2038, 17,500 gals. Nos. 2040-2043, 22,000 gals.
¶ Nos. 2001, 2002, 2010-2012, 2014, 2015, 2018, 2020, 2021, 2023, 2024, 24 tons coal.

## Great Northern Articulateds.

LIKE most roads operating in rough country, the Great Northern has quite a fleet of articulated locomotives, some of which are used in the Lake Superior iron country (No. 2018 above is leaving Superior, Wis., for the range with 175 empties) and others in the Rockies. The specifications for the Great Northern's 70 articulateds are at left. All of these are products of the road's shops except the M-2's (which were built by Baldwin in 1910 and changed from compound to simple by the Great Northern in 1926-27), the first four R-1's (Baldwin-built in 1925), and the Z-6's (built by American Locomotive Company in 1937).

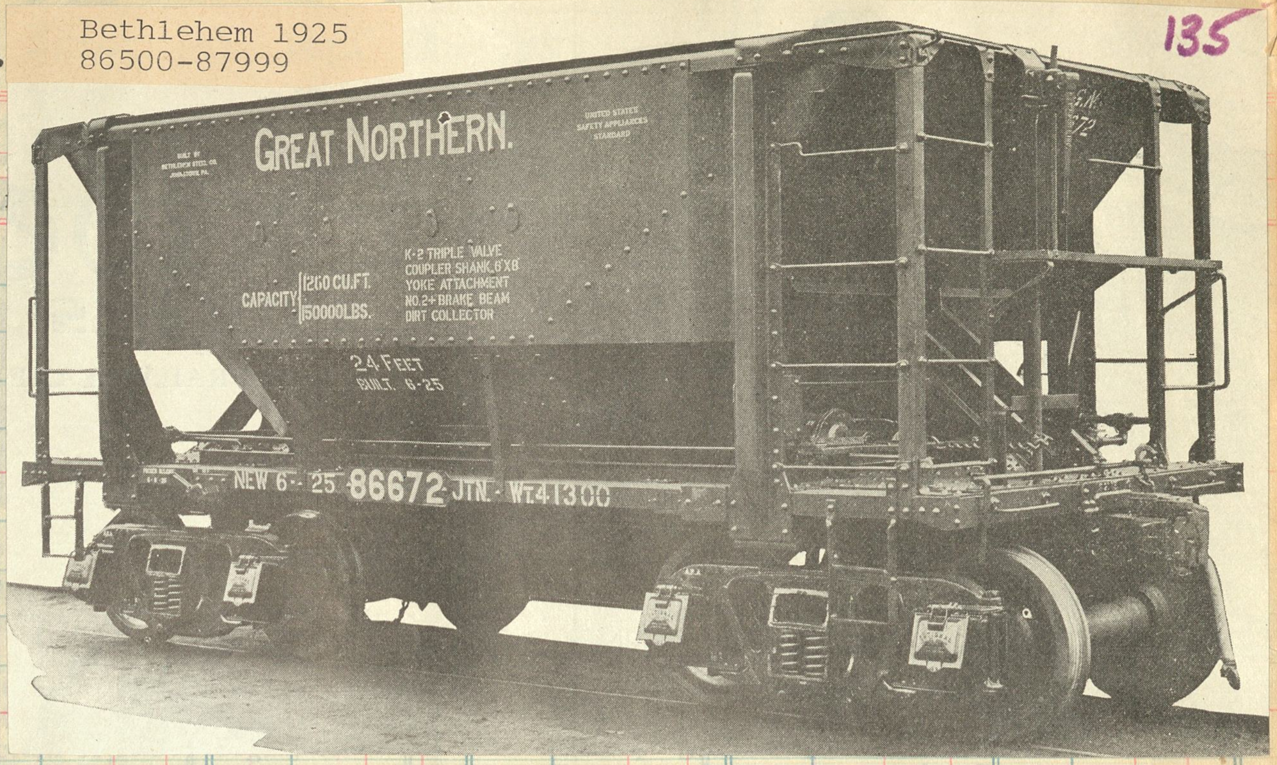


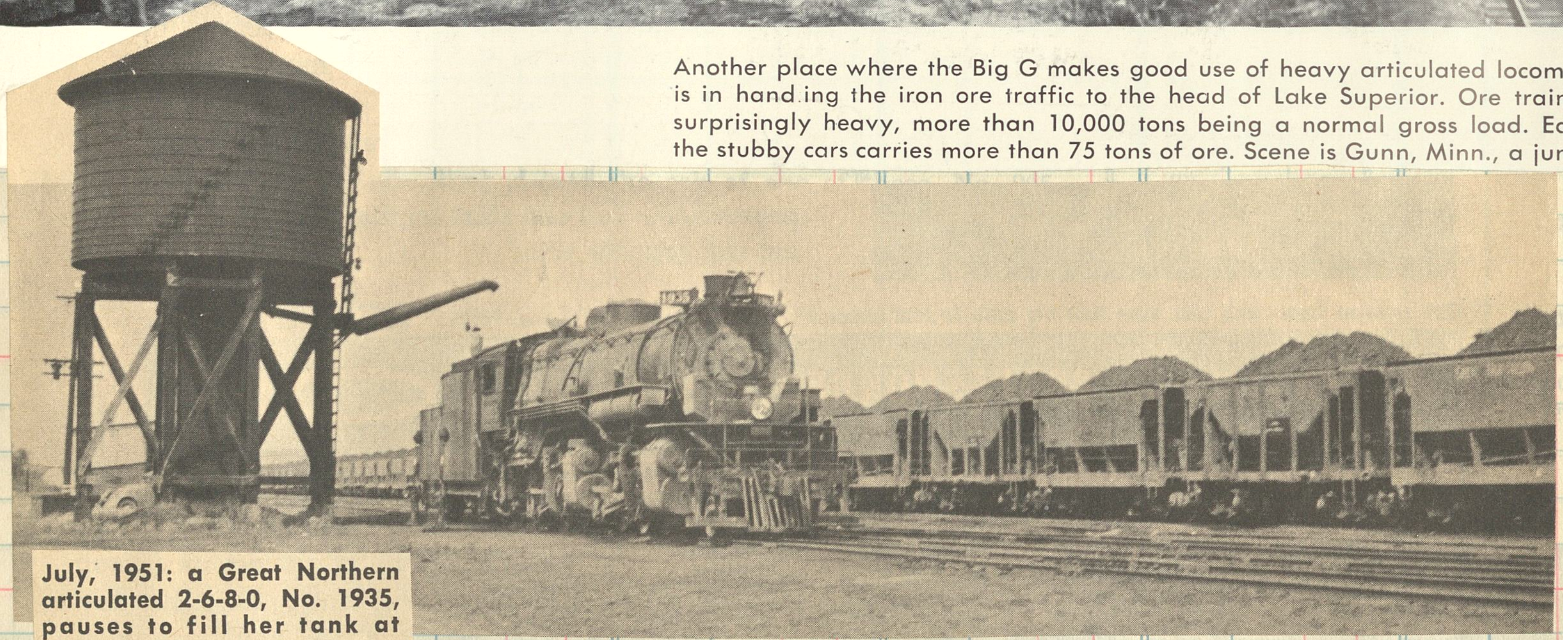
2000-2024 Baldwin 1912 Class N-1
All reblt at Superior 1924-26 and
classed N-2. Again all were rebuilt
1939-41 and classed as N-3



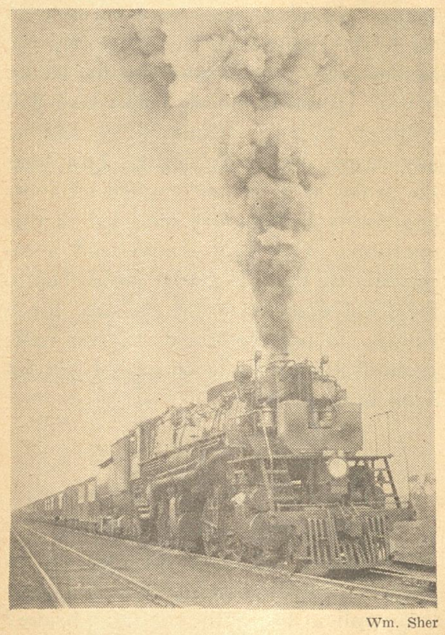
Another place where the Big G makes good use of heavy articulated locomotives is in handling the iron ore traffic to the head of Lake Superior. Ore trains run surprisingly heavy, more than 10,000 tons being a normal gross load. Each of the stubby cars carries more than 75 tons of ore. Scene is Gunn, Minn., a junction.

Bethlehem 1925
86500-87999


GREAT NORTHERN.
CAPACITY 1260 CU.FT. 150000 LBS.
K-2 TRIPLE VALVE
COUPLER SHANK 6X8
YOKE ATTACHMENT
NO.2+ BRAKE BEAM
DIRT COLLECTOR
24 FEET
BUILT 6-25
NEW 6-25 86672 JTN. WT. 41300



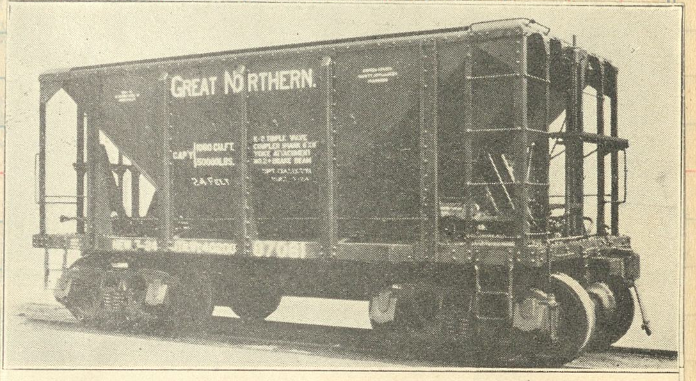
**July, 1951: a Great Northern articulated 2-6-8-0, No. 1935, pauses to fill her tank at Cloquet, Minn., water tower.**



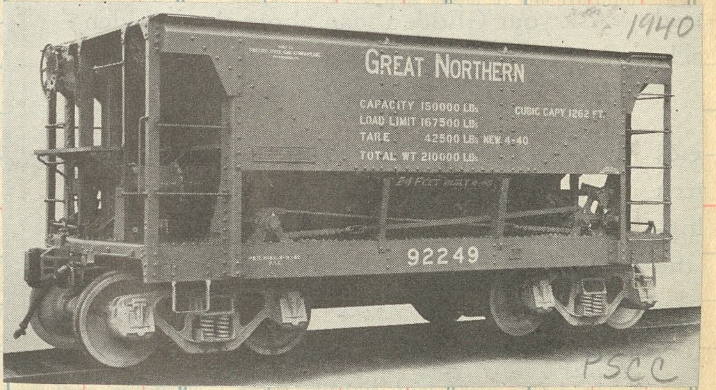
Wm. Sher

GREAT NORTHERN'S ENGINE 2021 PULLING HEAVY ORE TRAIN

This photo was taken between Kelly Lake, Minn., and Superior, Wis. Brother B. Bernstrom, Div. 290, was at the throttle.


GREAT NORTHERN

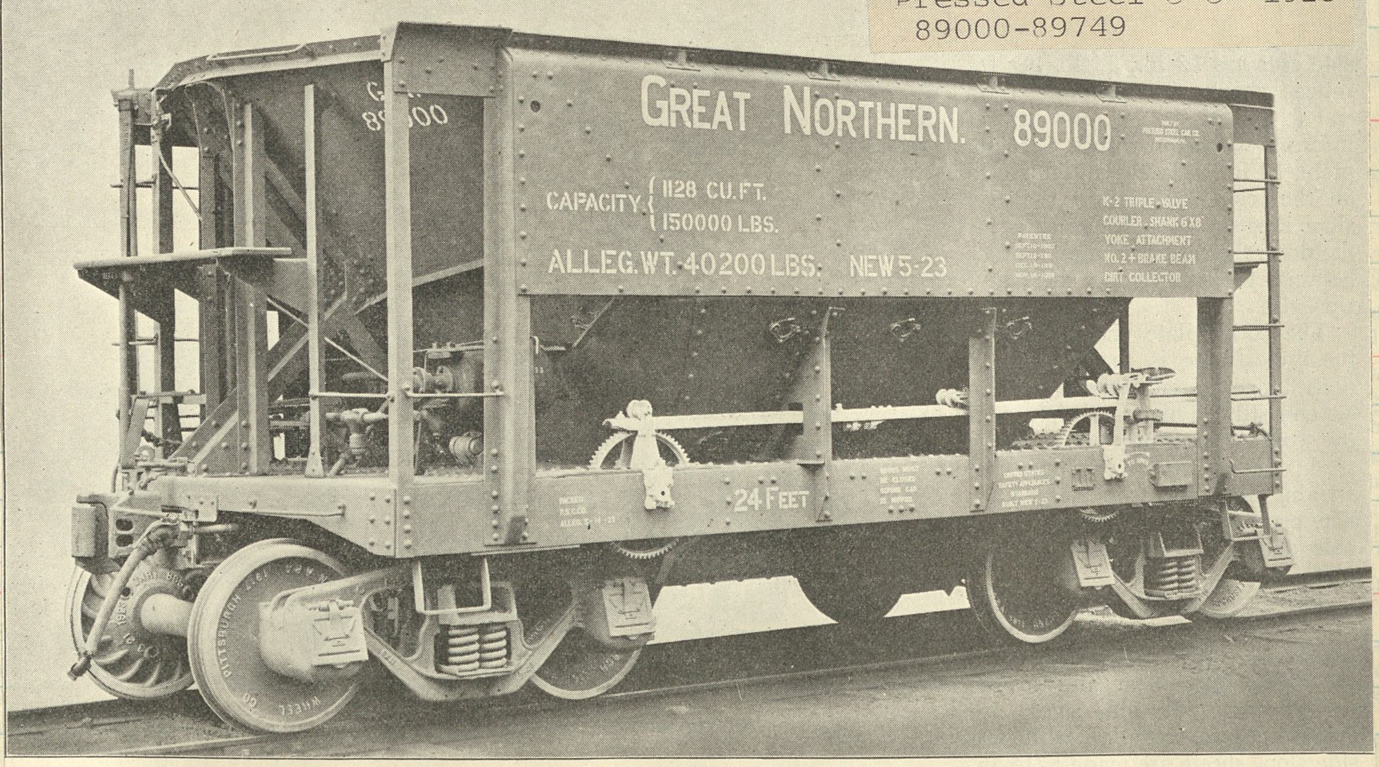
75-Ton Capacity All Steel Ore Car. 1924


GREAT NORTHERN
CAPACITY 150000 LBS
CUBIC CAPY 1262 FT.
LOAD LIMIT 167500 LBS
TARE 42500 LBS NEW 4-40
TOTAL WT 210000 LBS
92249

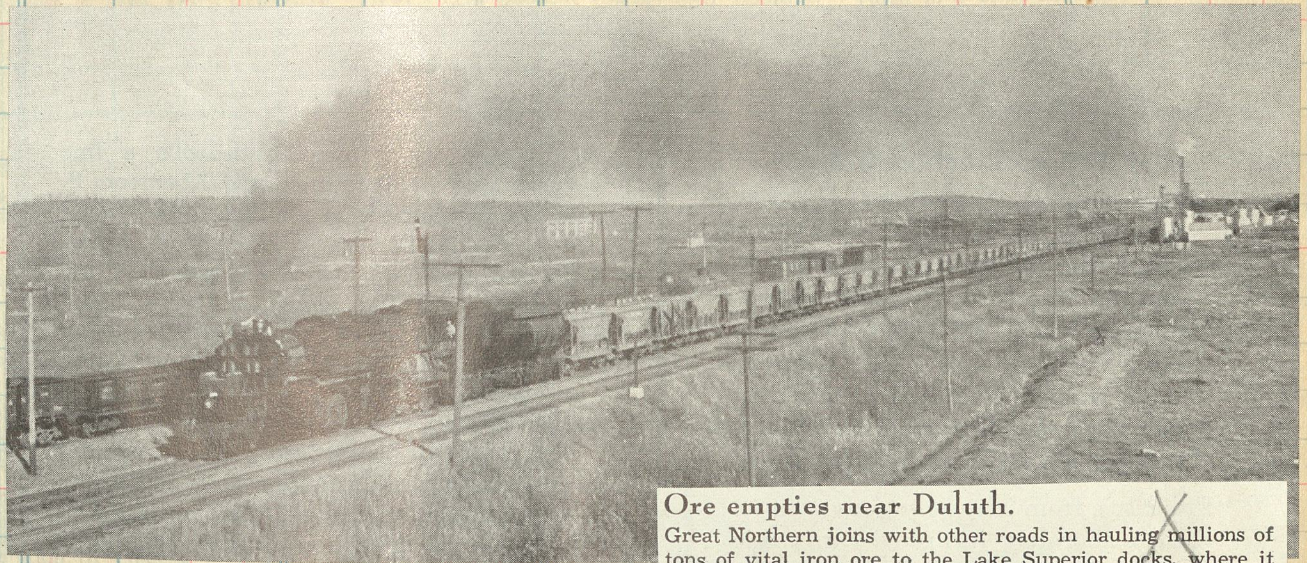
1940

PSCC

Pressed Steel C C 1923
89000-89749


GREAT NORTHERN. 89000
CAPACITY 1128 CU.FT. 150000 LBS.
ALLEG.WT. 40200 LBS. NEW 5-23
K-2 TRIPLE VALVE
COUPLER SHANK 6X8
YOKE ATTACHMENT
NO.2+ BRAKE BEAM
DIRT COLLECTOR
24 FEET

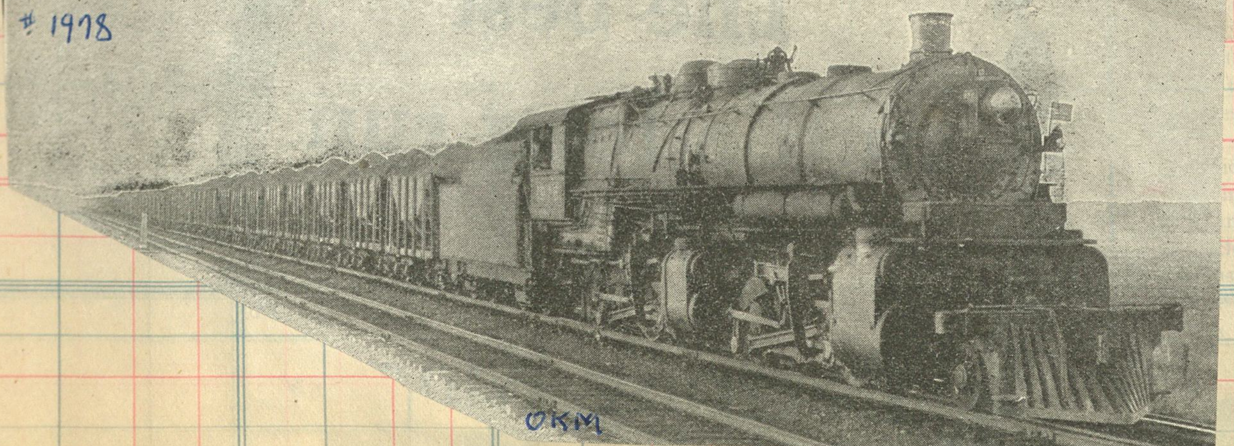
Seventy-Five Ton Ore Cars of Improved Design



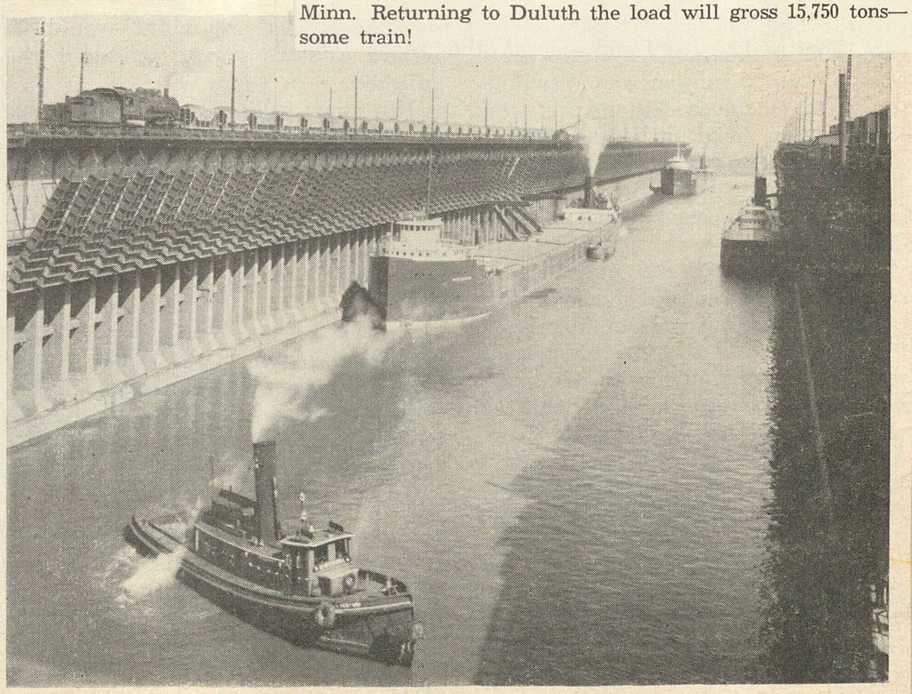
**Ore empties near Duluth.**

Great Northern joins with other roads in hauling millions of tons of vital iron ore to the Lake Superior docks, where it is loaded into ships for the journey down the lakes to the railheads of the Pittsburgh area. Here a train of 175 empties goes up to the Mesabi Range through Cloquet, Minn. Returning to Duluth the load will gross 15,750 tons—some train!

# 1978



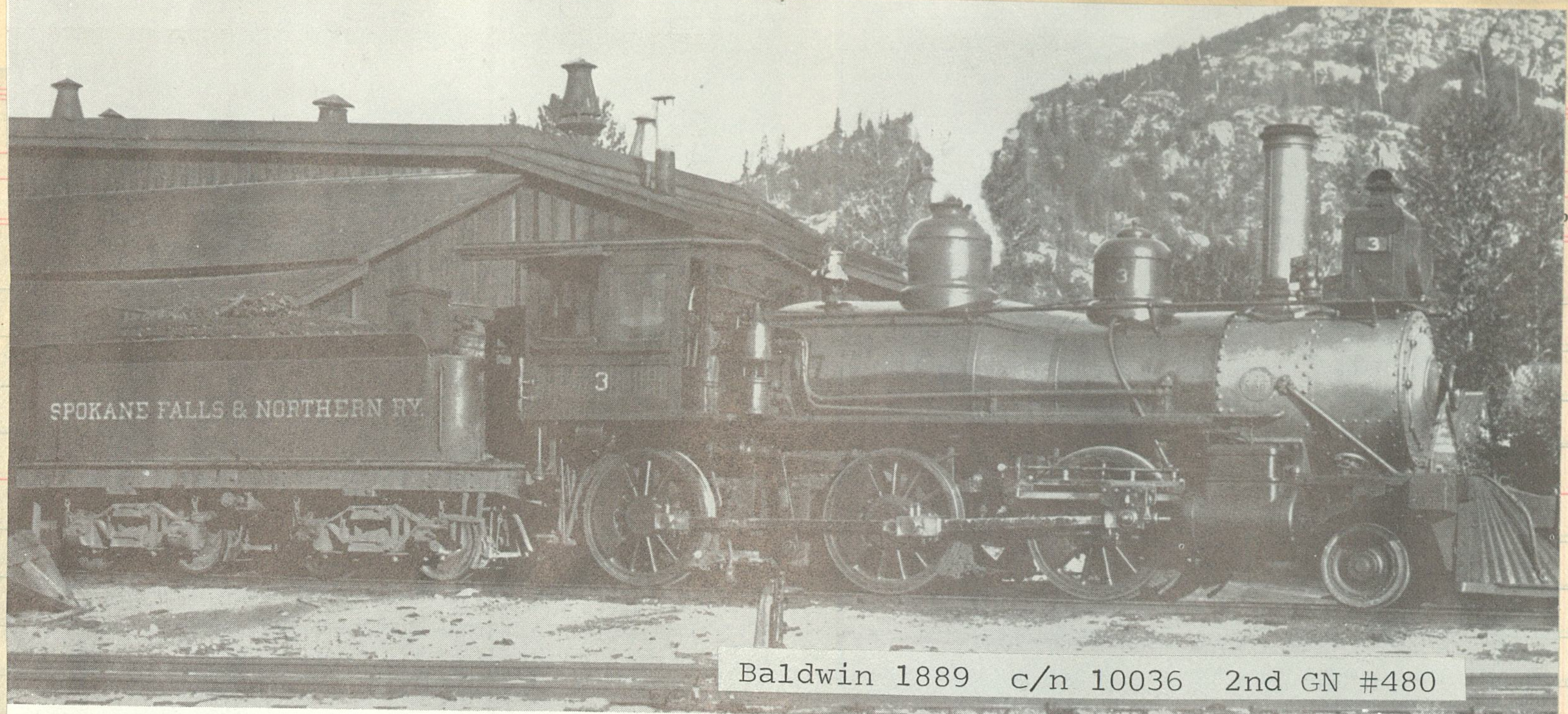
OKM



ORE DOCK AT SUPERIOR

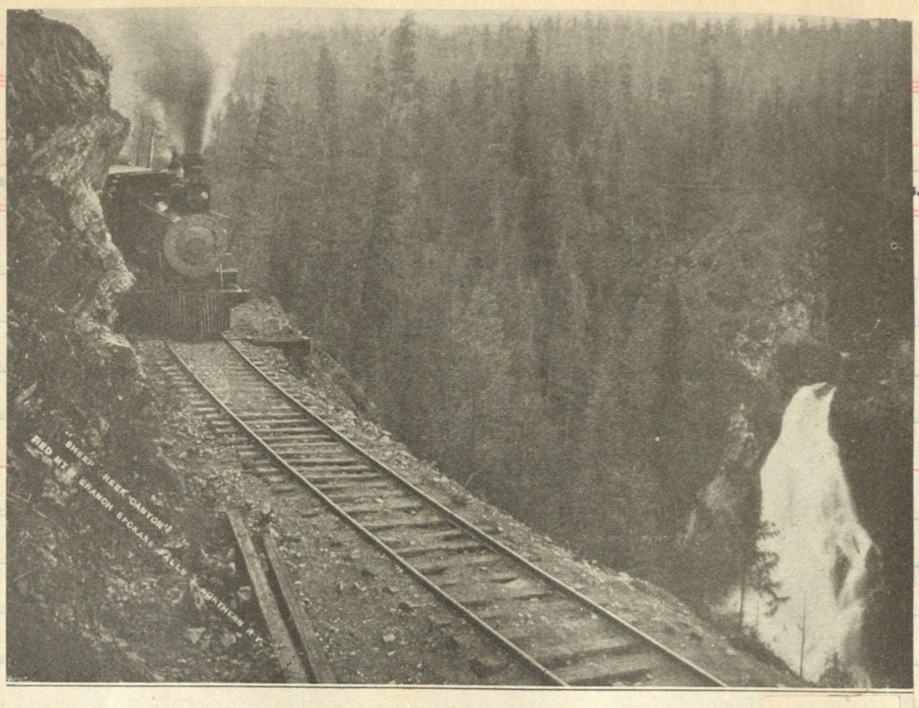
Sold

s. No. Sold Amount Clos. No. Sold Amount



Baldwin 1889 c/n 10036 2nd GN #480

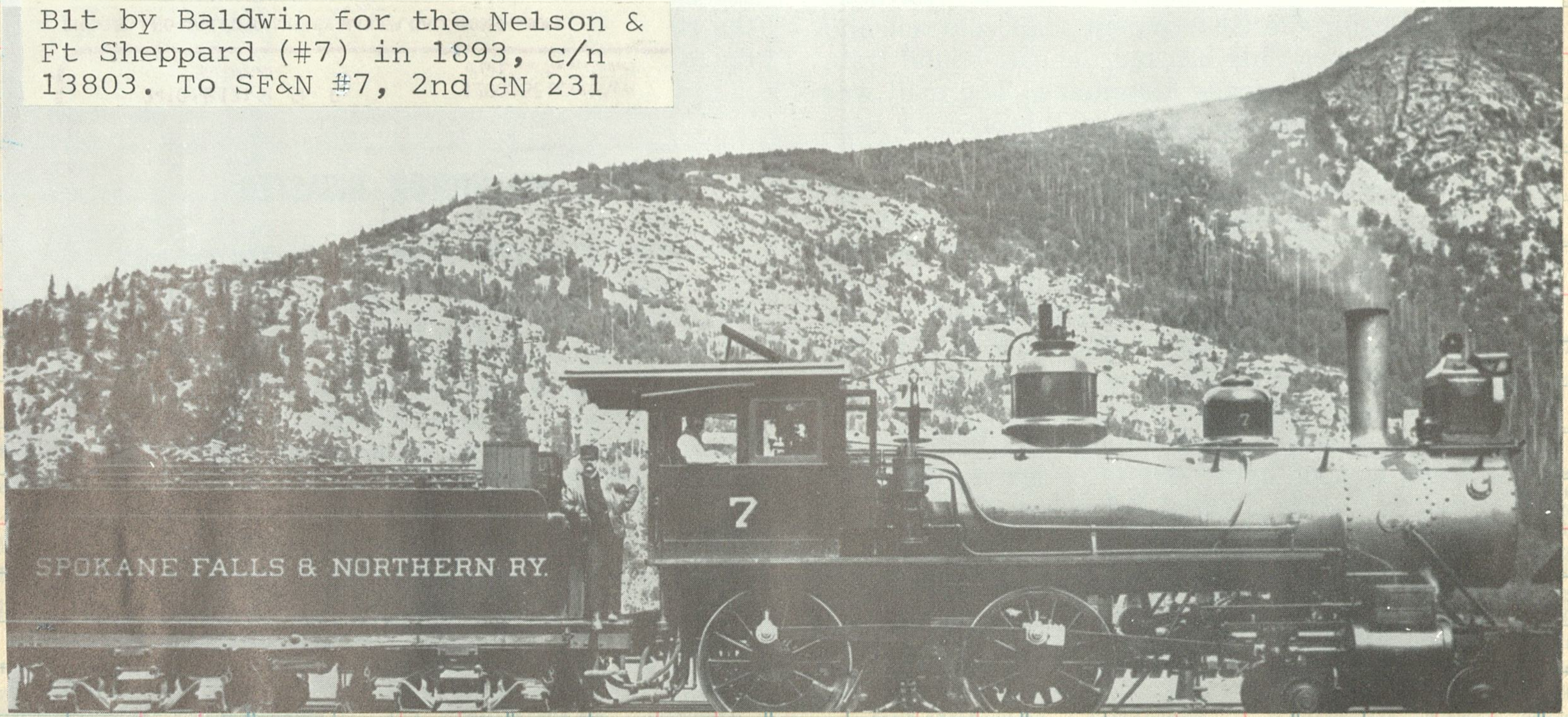
**SPOKANE FALLS & NORTHERN RAILWAY** ran from Spokane to the International Boundary, where it connected with the Nelson & Fort Sheppard Railway to reach Troup Junction; S. F. & N. trains reached Nelson, B.C., where this photo of Engine 3 was taken, by operating over Canadian Pacific trackage from Troup Jct. to Nelson, a distance of about 5 miles. (Courtesy of Fred Jukes) ✓

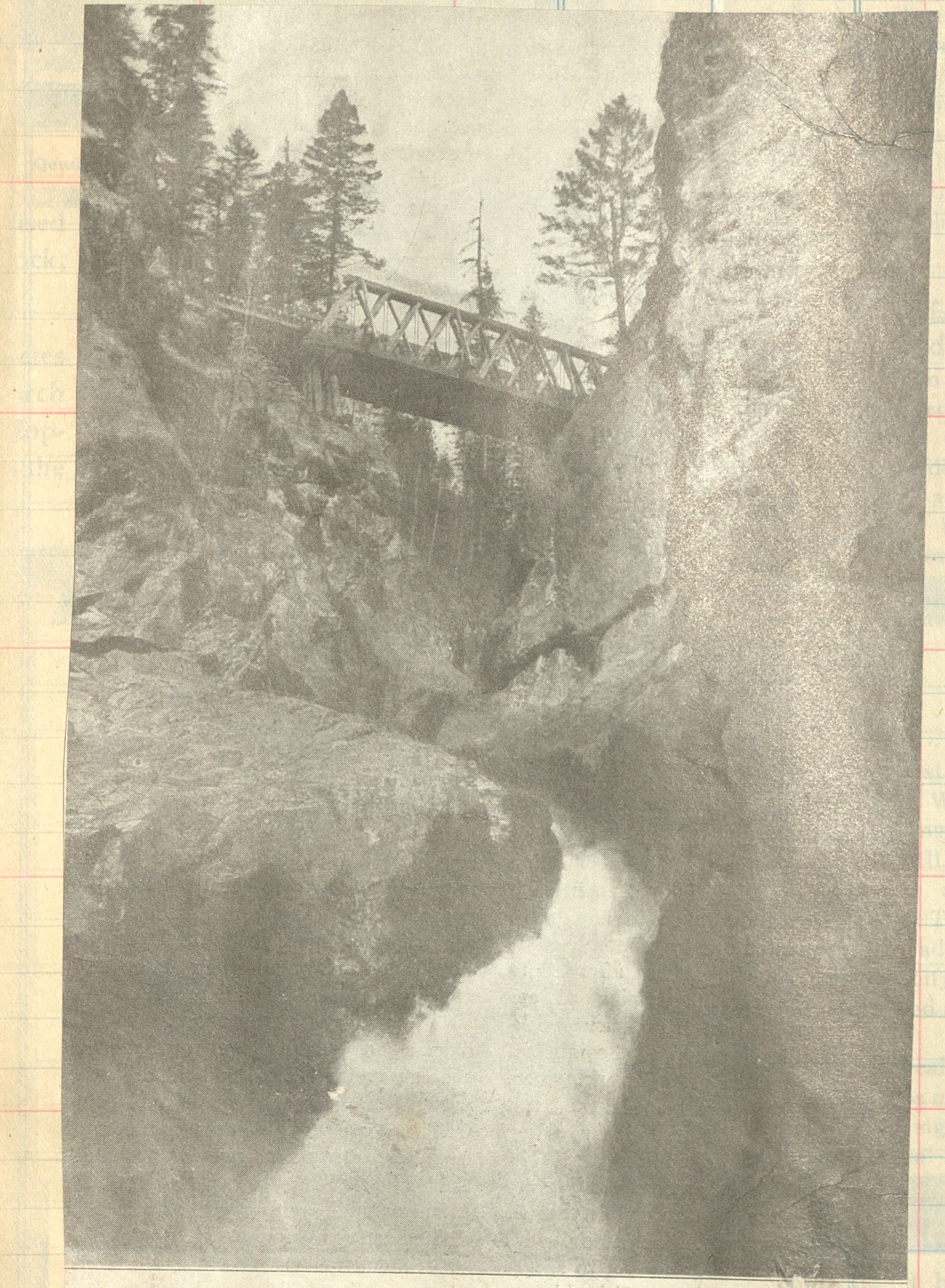


SHEEP CREEK CANON. SPOKANE FALLS AND NORTHERN RY. O K M

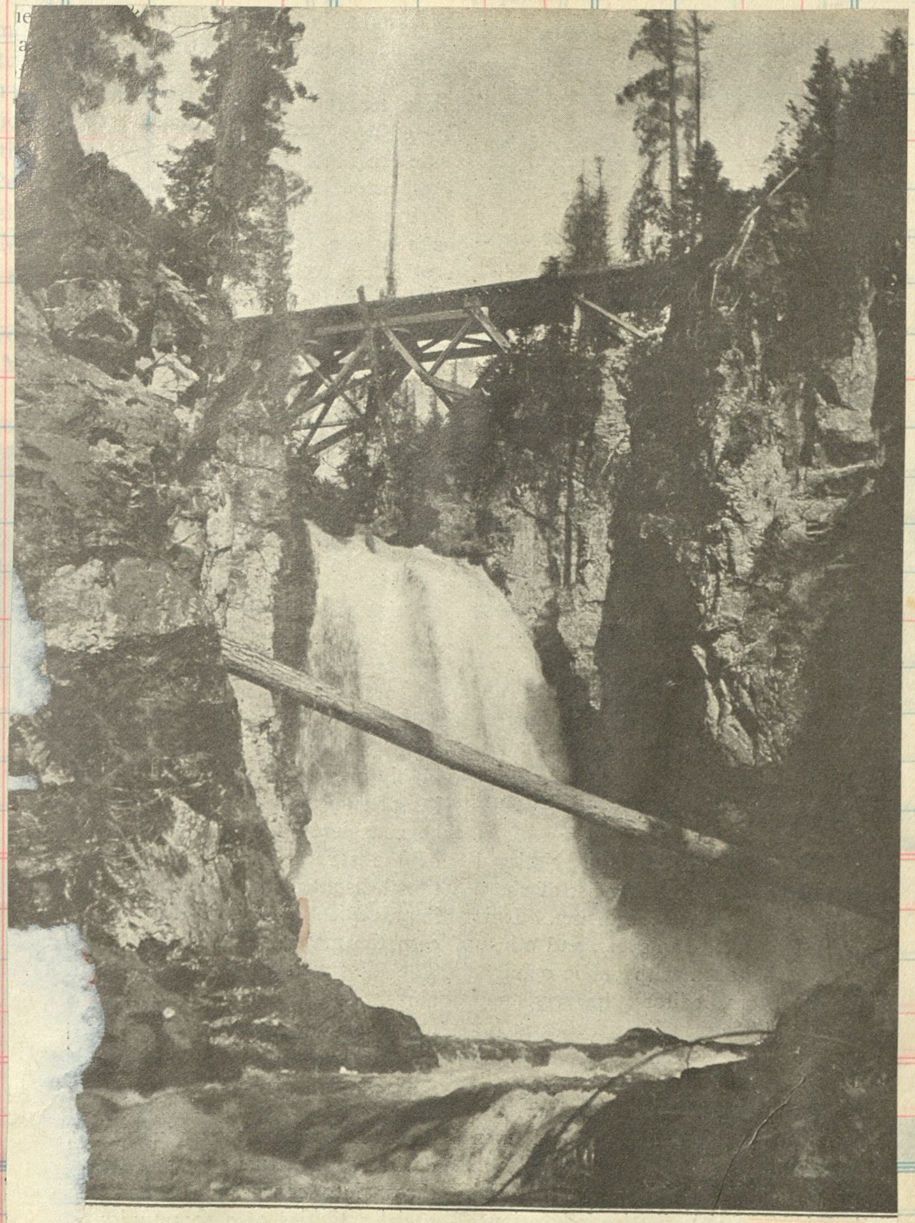
**SPOKANE FALLS & NORTHERN'S ENGINE 7** was a neat 4-4-0 coal-burner, as shown in this photo at Nelson, B.C., in 1902. The S. F. & N. Ry. and the connecting Nelson & Fort Sheppard Railway were controlled by Hill's Great Northern Railway. Road owned 11 locomotives in 1906. (Courtesy of Fred Jukes) ✓

Blt by Baldwin for the Nelson & Ft Sheppard (#7) in 1893, c/n 13803. To SF&N #7, 2nd GN 231

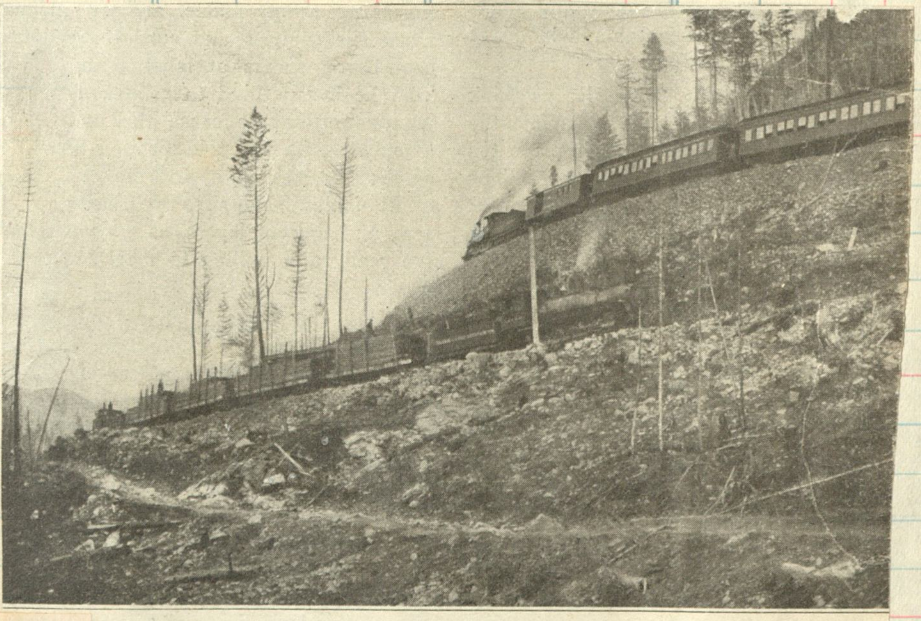




UPPER SHEEP CREEK FALLS. SPOKANE FALLS AND NORTHERN OKM



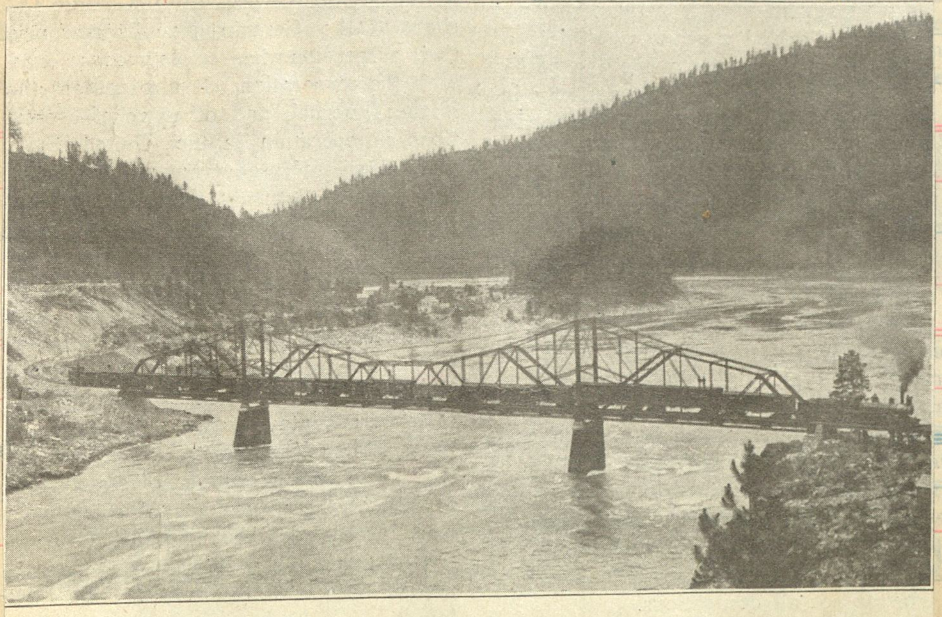
BEAVER FALLS. SPOKANE FALLS AND NORTHERN RY. O K M



OKM THE LOOP, NEAR ROSSLAND, B. C. SPOKANE FALLS AND NORTHERN RY.

TERMINALS OF NELSON AND FT. SHEPARD RY. O K M

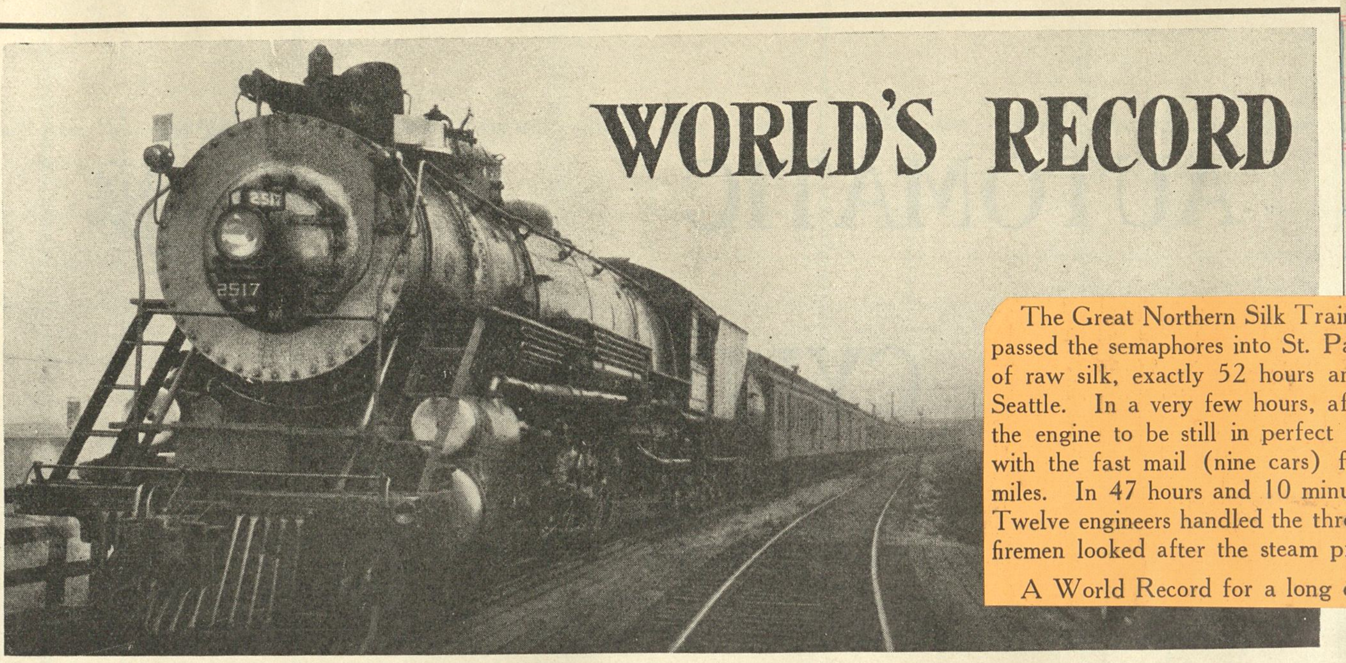
Where passengers and freight are transferred to Kootenay Lake steamers



STEEL BRIDGE SPANNING PEND D'OREILLE AT CONFLUENCE WITH THE COLUMBIA RIVER
SPOKANE FALLS AND NORTHERN RY. O K M

February 13, 1926 RAILWAY AGE 71

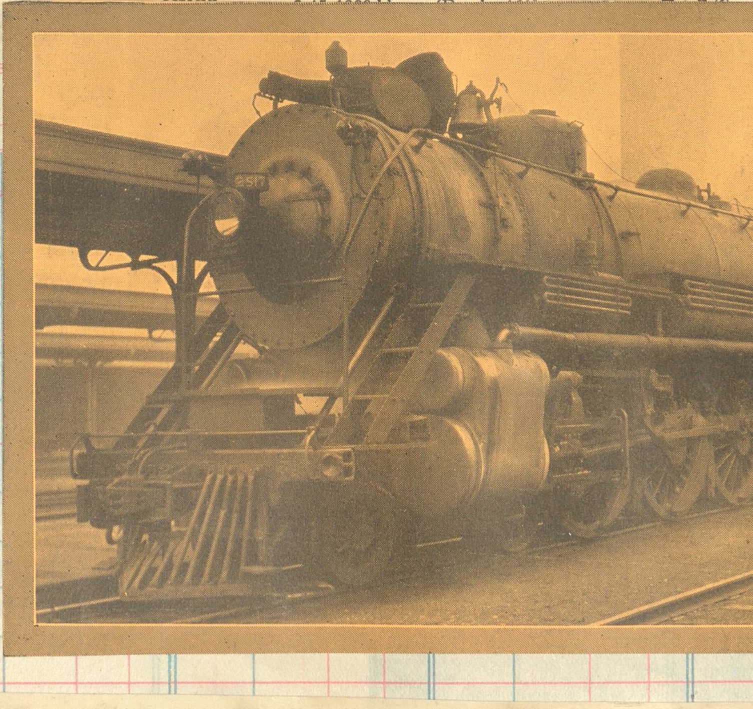
# WORLD'S RECORD



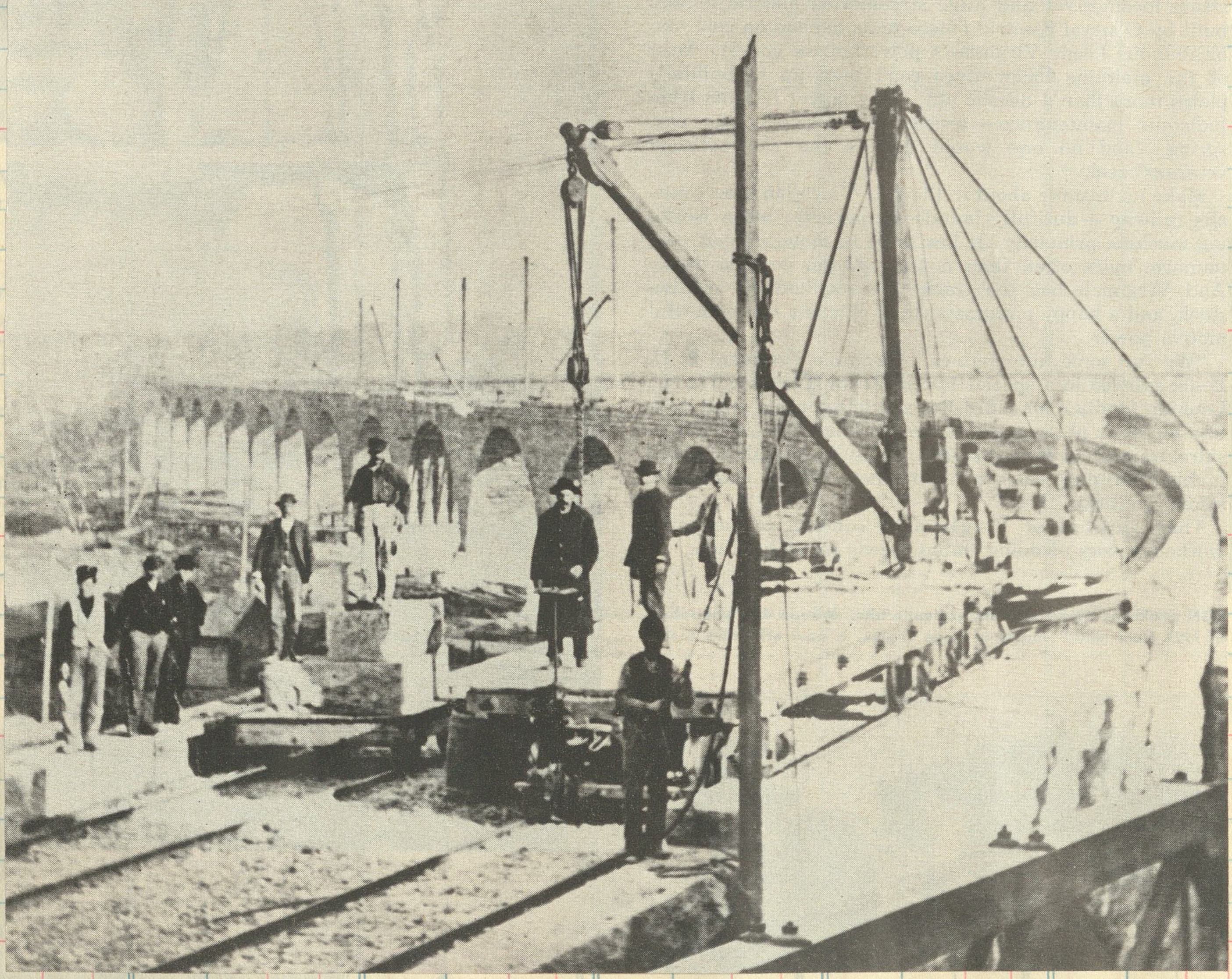
The Great Northern Silk Train of 18 express cars recently passed the semaphores into St. Paul with a $5,000,000 load of raw silk, exactly 52 hours and 35 minutes after leaving Seattle. In a very few hours, after inspection which showed the engine to be still in perfect running order, it pulled out with the fast mail (nine cars) for the return run of 1,793 miles. In 47 hours and 10 minutes, it was in Seattle again. Twelve engineers handled the throttle each way, and as many firemen looked after the steam pressure.

A World Record for a long distance, *continuous* run.

**THIS GREAT NORTHERN RAILWAY LOCOMOTIVE ESTABLISHED A WORLD'S RECORD FOR LONG DISTANCE CONTINUOUS TRAVEL—3,571 MILES, FROM SEATTLE, WASH., TO ST. PAUL, MINN., AND RETURN**

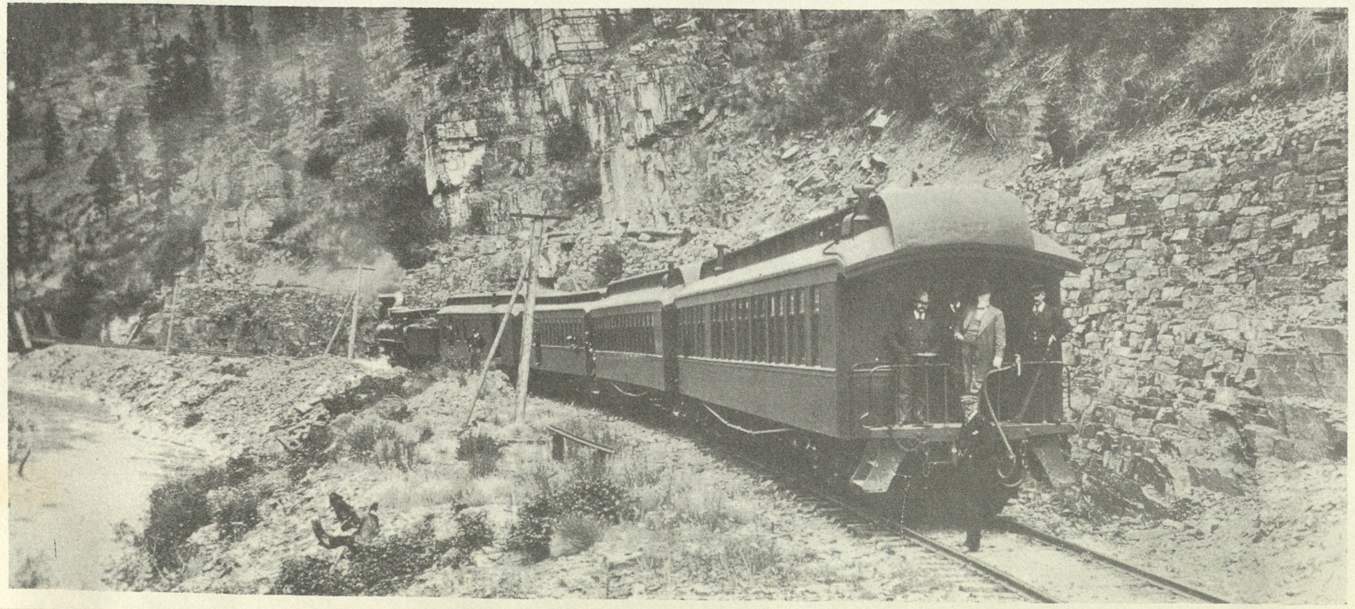


Building the beautiful stone arch bridge across the Mississippi at St. Anthony's Falls. Constructed by the Minneapolis Union Ry under direction of Col. Charles C. Smith, Chief Engineer in 1882-1883. It is 2,100' long, 76' high and 28' wide and cost $609,000.



**MONTANA CENTRAL RAILWAY** was organized in 1886 and operated about 249 miles of standard gauge lines, the main stem running from Great Falls to Butte, via Helena. From Great Falls the road swung southwest and followed along the upper reaches of the Missouri River, passing east of the main divide of the Rockies and west of the Big Belt Mountains. A branch running southeast out of Great Falls divided into smaller branches tapping the mines at Sand Coulee, Stockett, and Neihart. The main line and most of the branches were opened for service between 1887 and 1893, the branch from Lewis Junction to Stockett being opened in 1898. Main traffic over the road was coal and ore, with seasonal livestock movements. The Sand Coulee coal was perhaps the most notorious locomotive fuel ever to land on the grates of an engine. The Great Northern Railway, controlling the entire stock of the Montana Central, extended a line from the southeastern branch out of Great Falls through the Judith Gap to Billings and a connection with the Burlington's line from Nebraska, the latter coming from Edgemont, North Dakota, through Sheridan, Wyoming. A branch from the Great Falls-Billings line extends from Moccasin to Lewiston, Montana. This early Montana Central passenger train is posed against the rocky terrain so typical of the intermountain region; the lever at right on the coach platform is a part of the old Miller "hook" coupling device.

(Courtesy of Great Northern Railway



# 25 Years of Accuracy From His Hamilton

HAMILTON
12
1
2
3
4
5
7
8
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10
11
50
10
40
20
30

Conductor McGraw of the Great Northern.

A veteran of forty years' railroad service, who has carried a Hamilton for a quarter of a century.

CONDUCTOR W. H. McGRAW of the Great Northern Railway is a veteran of forty years' service. For the past twenty-five years he has timed his trains with a Hamilton.

Last year, when the William Crooks Special made its celebrated run from Chicago to Seattle, Conductor McGraw was chosen to take charge of this unique train, which stopped at St. Paul, Minneapolis, Fargo, Grand Forks, Helena, Butte, Portland, Spokane and other western cities, and was inspected by over 300,000 people.

When Conductor McGraw, a quarter of a century ago, chose the Hamilton as his watch he selected it because of its timekeeping qualities and its dependability. Years of service have proved the wisdom of his choice.

Thousands of other railroad men from coast to coast are proving the wisdom of carrying a Hamilton. These men know that accuracy is the very foundation upon which Hamilton Watches are built, and that sturdiness that makes for years of service is a part of every Hamilton Watch.

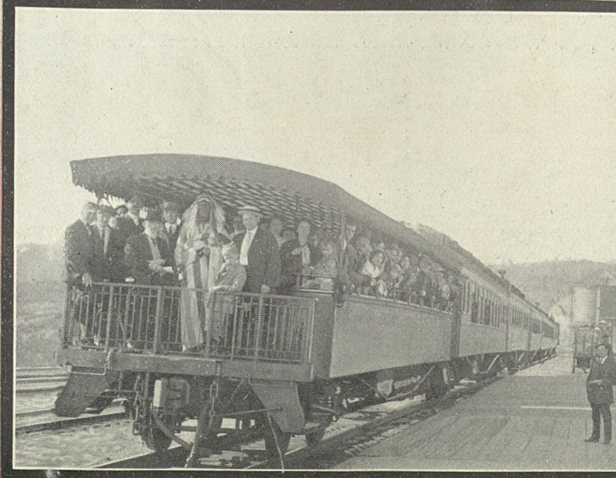
Ask your jeweler to show you the Hamilton 992 railroad model here pictured. This watch is a combination of the famous Hamilton 992 movement with a case that is built especially for it—a case that is dust-proof and sturdily wrought from filled gold in yellow, green, or white. As you look at this new model remember when you purchase a Hamilton you are at once assuring yourself of time service of the sort that has been enjoyed by veterans like Conductor McGraw.

We have a copy of our new railroad men's time book for you. Write for it today.

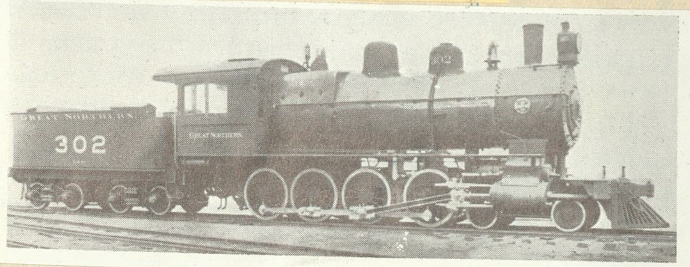
1925

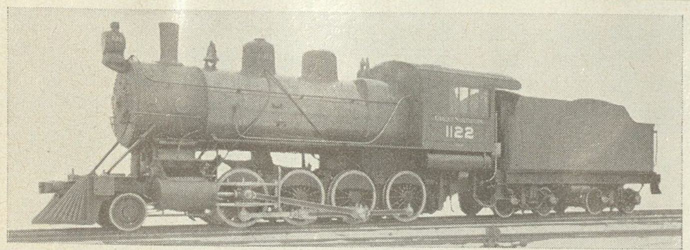
HAMILTON WATCH COMPANY
LANCASTER, PENNA., U. S. A.

**Hamilton Watch**
"The Railroad Timekeeper of America"

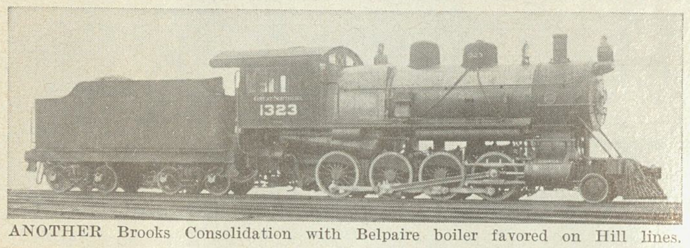


HILL POWER

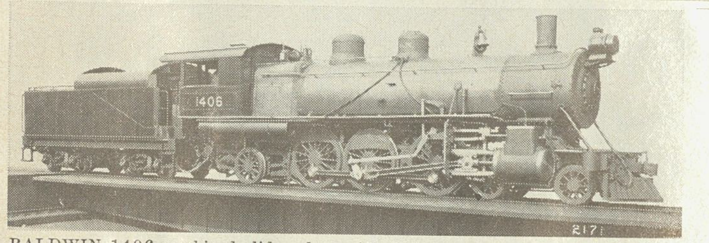




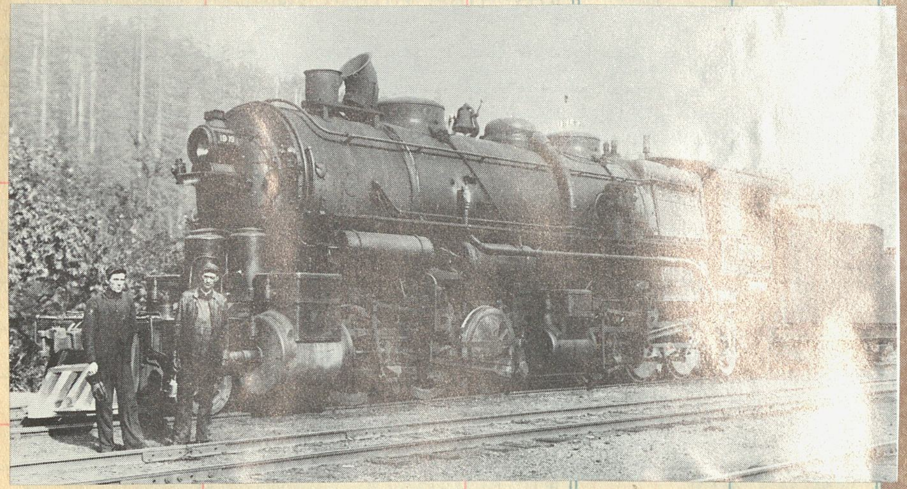
TYPICAL Brooks 2-8-0 of 1901 dug in with 41,500 pounds of tractive effort.



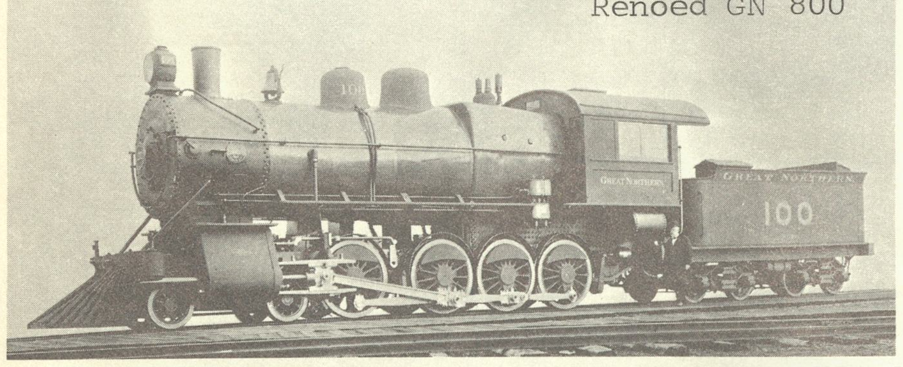
ANOTHER Brooks Consolidation with Belpaire boiler favored on Hill lines.

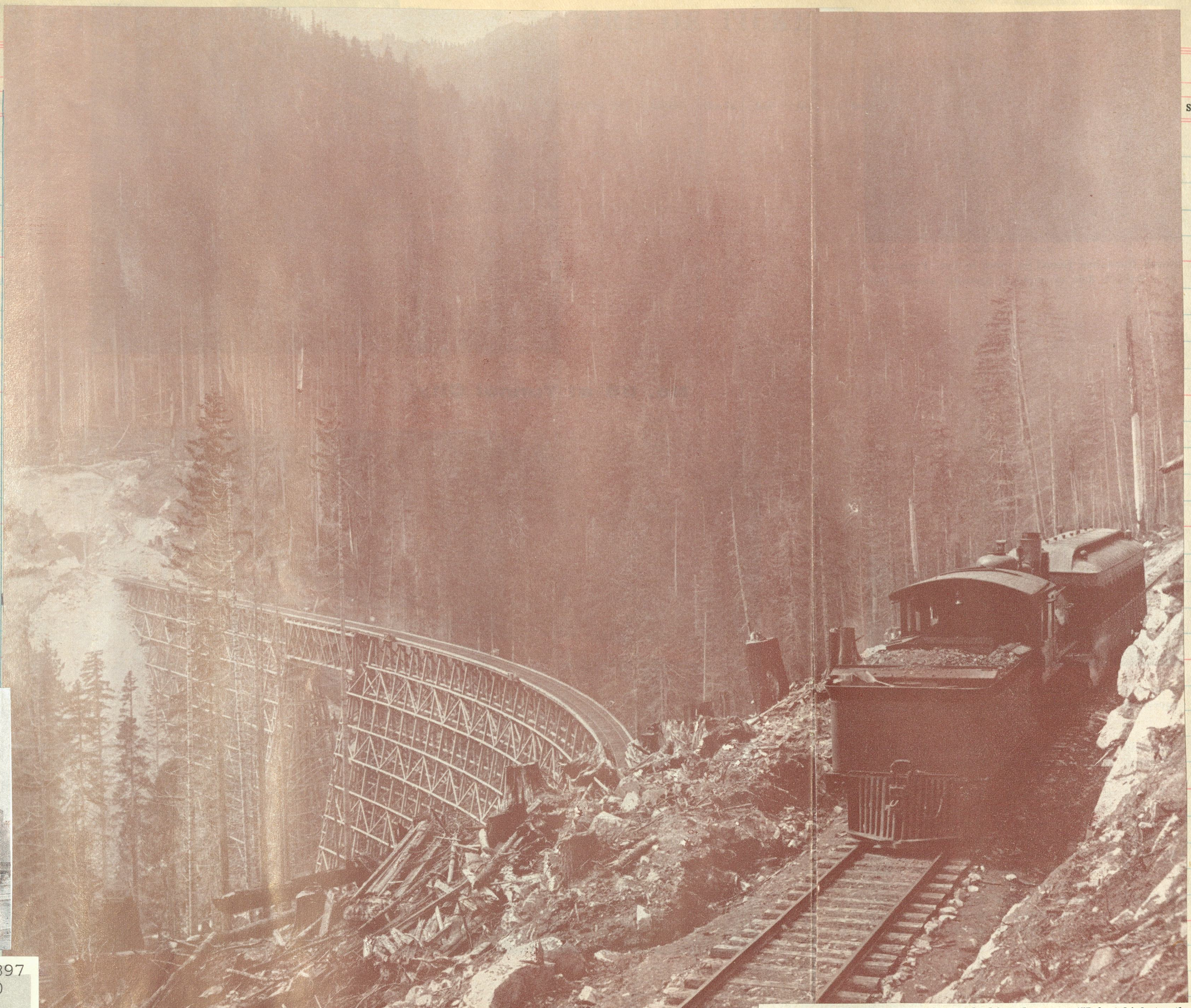


BALDWIN 1406 combined slide valves with Walschaerts gear. H. L. Broadbelt.



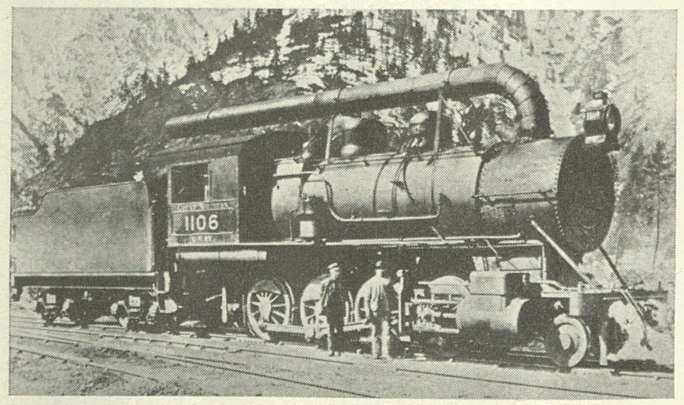
Montana Central #100 c/n 2866 Brooks 1897
Renoed GN 800



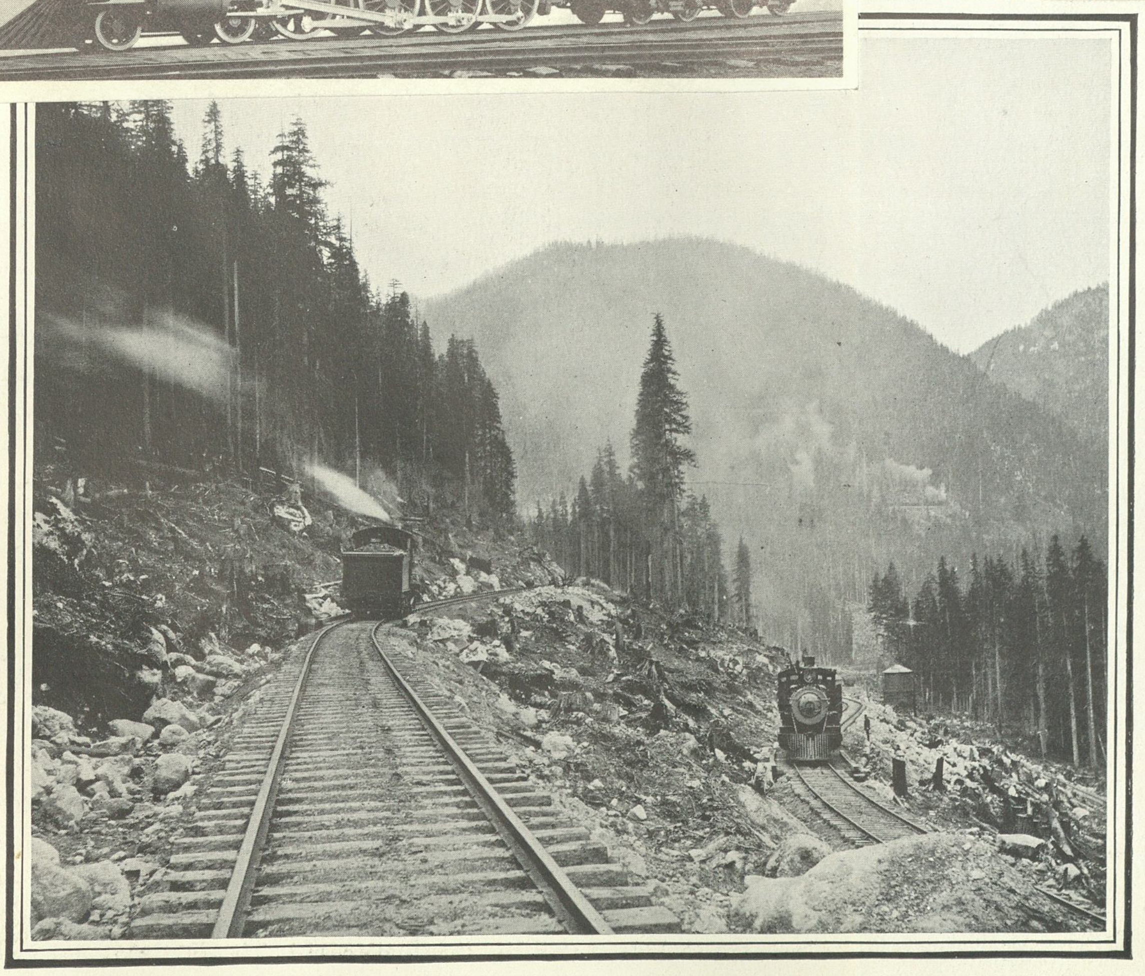


THOSE aboard inspection train are looking down on 157-foot-high trestle that led into Horseshoe (Martin's Creek) Tunnel, 5 miles west of switchback.

It took a lot of praying, and nerves of steel,
to railroad over country like this!!!

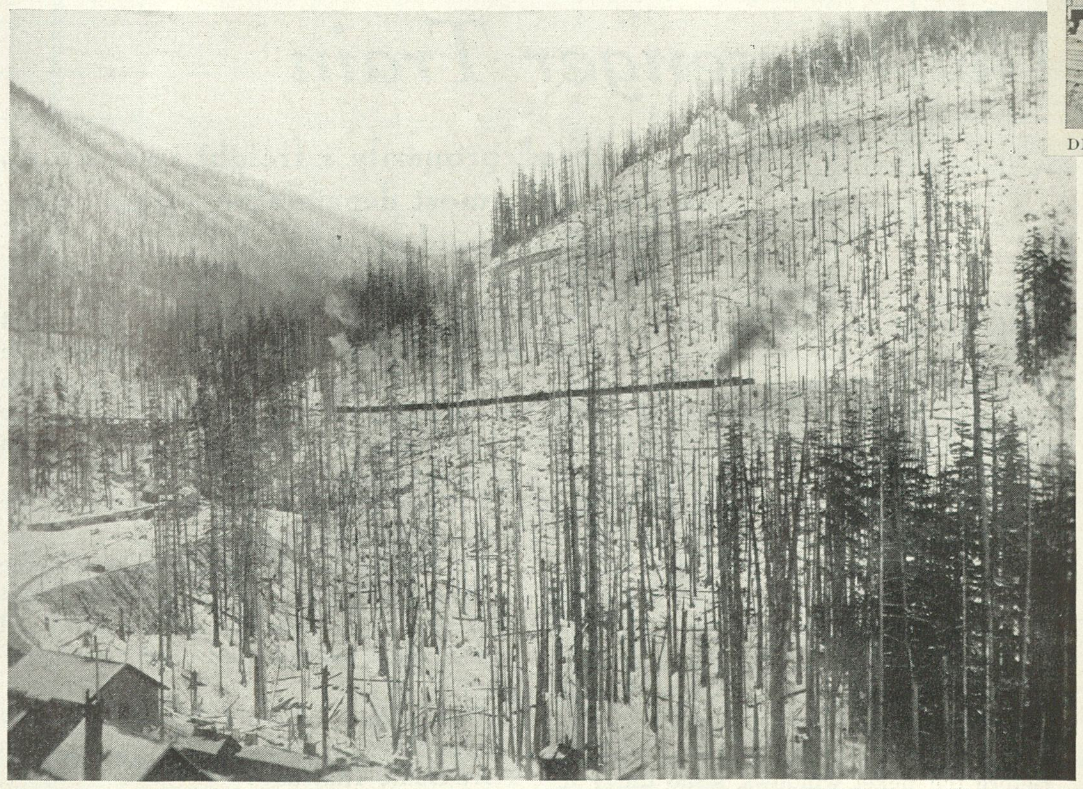


DESPITE such extreme measures as 1106's stack, crew got hot in tunnel.



HOW THE AMERICAN GREAT NORTHERN DESCENDS THE PACIFIC SLOPE.

Showing the three tracks which are connected by huge loops. The engines are backing down the grade to push up another train from the bottom. In the distance may be seen the train which they have helped up, and which has wormed right round the valley.



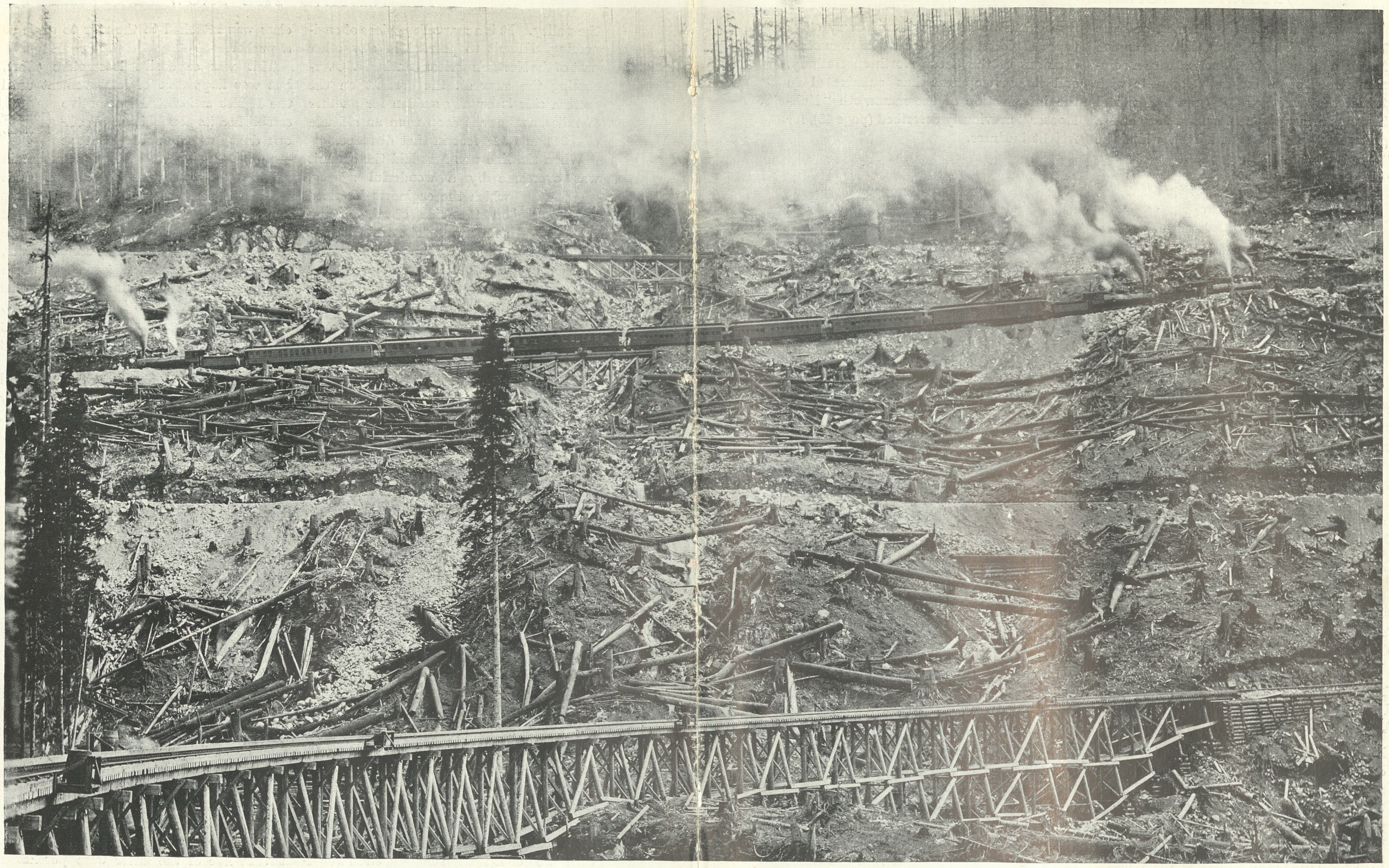
Collection of Albert Farrow.

Tye was then called Wellington.

~~At the lower left of this old photograph is the construction work on the first Cascade Tunnel.~~ In the background is Stevens Pass with the four levels of track approaching it to the right. A sharp eye can detect three trains working up the zigzag, as well as several of the old timber trestles. Taken about 1898.

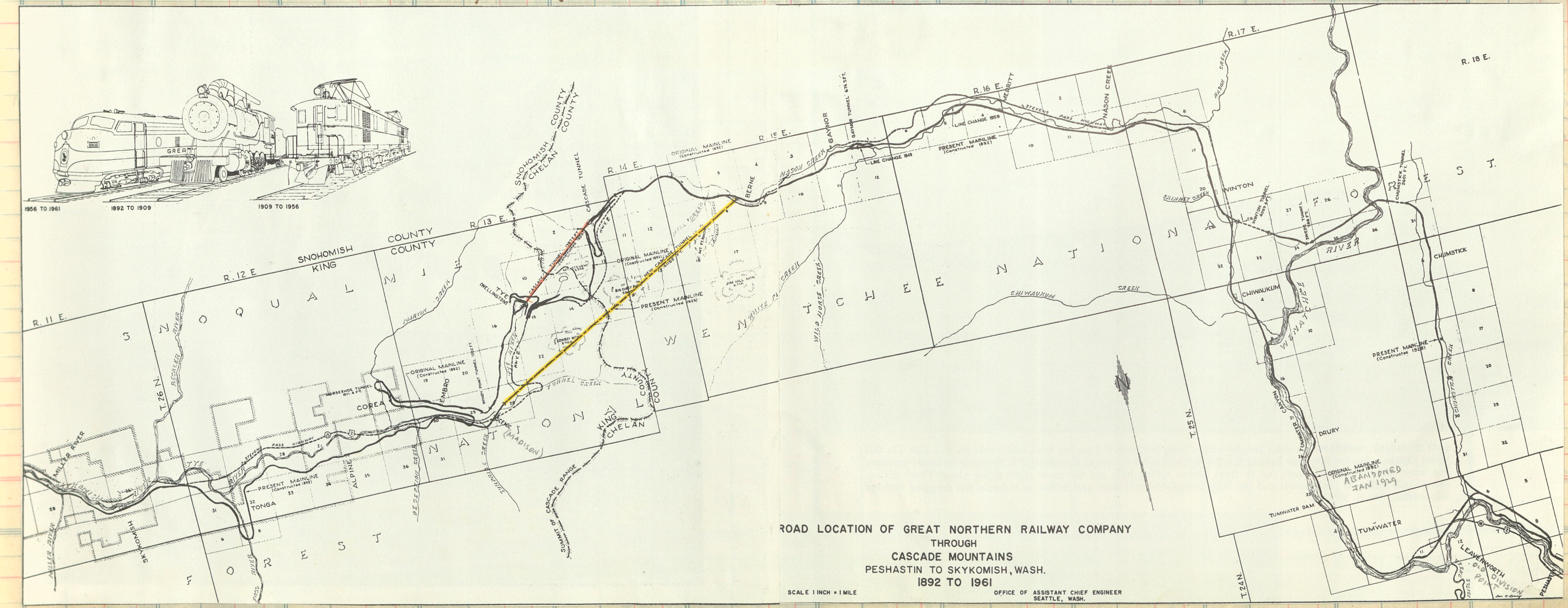
Clos. No. Sold Amou

Clos. No. Sold Amount



THE "ZIG-ZAG" WHEREBY THE CASCADE MOUNTAINS WERE NEGOTIATED DURING THE PERIOD THE CASCADE TUNNEL WAS UNDER CONSTRUCTION.

The Great Northern Limited, of seven Pullmans, weighing 280 tons, had to be lifted over the steps of the zig-zag by means of three locomotives. In the photograph four tracks are to be seen. This expensive temporary line was abandoned directly the tunnel was completed.


1956 TO 1961
1892 TO 1909
1909 TO 1956
R. 11 E.
R. 12 E
R. 13 E.
R. 14 E.
R. 15 E.
R. 16 E.
R. 17 E.
R. 18 E.
SNOHOMISH COUNTY
KING COUNTY
SNOHOMISH COUNTY
CHELAN COUNTY
KING COUNTY
CHELAN COUNTY
SNOQUALMIE
FOREST
NATIONAL
WENATCHEE NATIONAL FOREST
T. 26 N.
T. 25 N.
T. 24 N.
CASCADE TUNNEL
TYE (WELLINGTON)
ORIGINAL MAINLINE (Constructed 1892)
NEW CASCADE TUNNEL
PRESENT MAINLINE (Constructed 1929)
MT. STEVENS
BIG CHIEF MTN
MT FERNOW
JIM HILL MTN
COWBOY MTN
WINDY POINT TUNNEL
HORSESHOE TUNNEL 1511.4 FT.
EMBRO
COREA
SCENIC
(MADISON)
TUNNEL CREEK
MARTIN CREEK
SUMMIT OF CASCADE RANGE
SURPRISE CREEK
DECEPTION CREEK
ALPINE
TONGA
PRESENT MAINLINE (Constructed 1892)
STEVENS PASS HIGHWAY
TYE RIVER
SKYKOMISH RIVER
MILLER RIVER
BECKLER RIVER
FOSS RIVER
SKYKOMISH
BERNE
NASON CREEK
GAYNOR
GAYNOR TUNNEL 674.5 FT.
LINE CHANGE 1949
LINE CHANGE 1959
PRESENT MAINLINE (Constructed 1892)
MERRITT
WILD HORSE CREEK
WHITE PINE CREEK
CHIWAUKUM CREEK
SKINNEY CREEK
WINTON
CHIWAUKUM
WENATCHEE RIVER
CHUMSTICK
CHUMSTICK CREEK
PRESENT MAINLINE (Constructed 1928)
TUMWATER CANYON
DRURY
ORIGINAL MAINLINE (Constructed 1892)
ABANDONED JAN 1929
TUMWATER DAM
TUMWATER
LEAVENWORTH
OLD DIVISION POINT
ICICLE CREEK
PESHASTIN

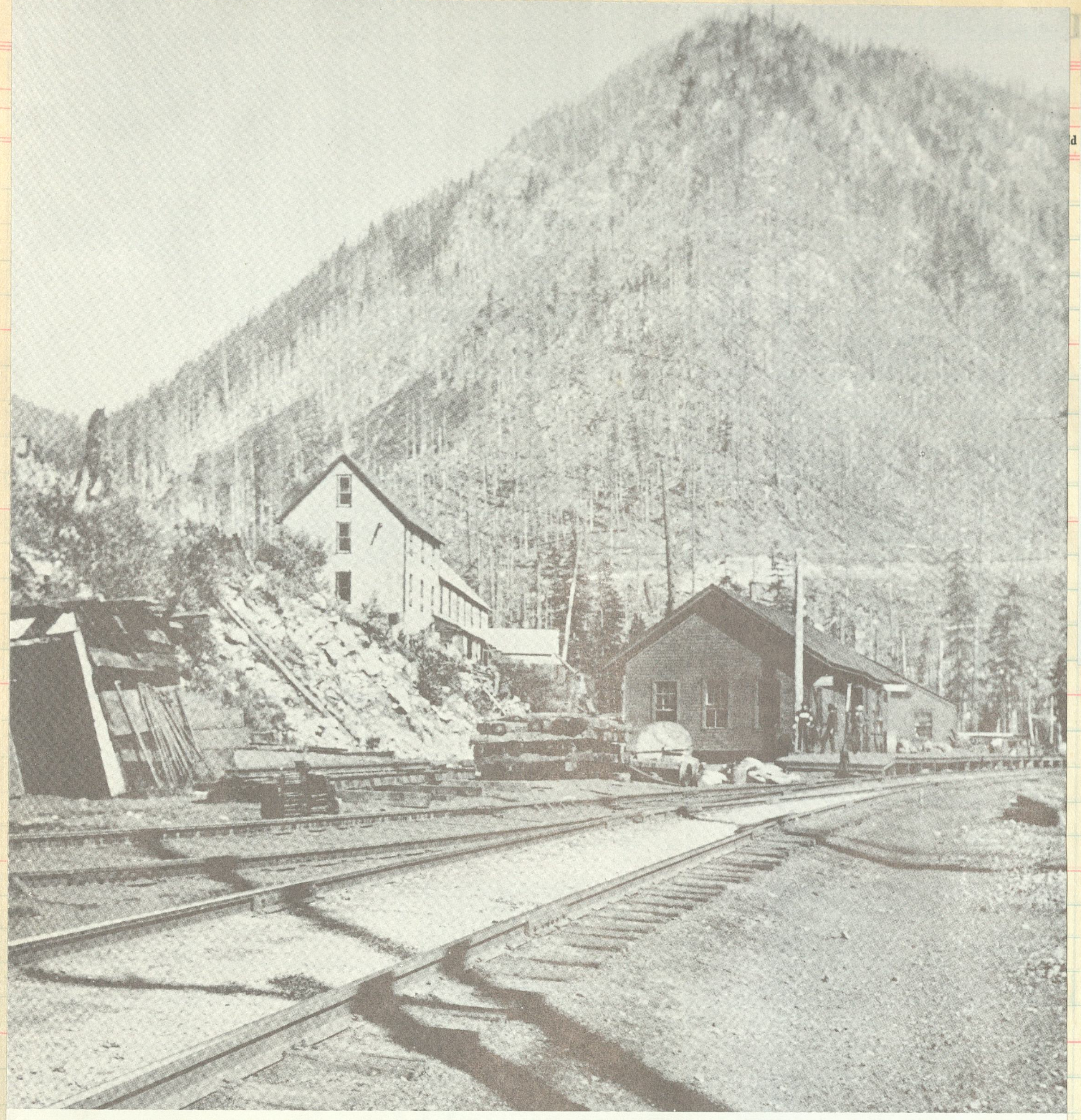
ROAD LOCATION OF GREAT NORTHERN RAILWAY COMPANY
THROUGH
CASCADE MOUNTAINS
PESHASTIN TO SKYKOMISH, WASH.
1892 TO 1961

SCALE 1 INCH = 1 MILE

OFFICE OF ASSISTANT CHIEF ENGINEER
SEATTLE, WASH.

Next Seller's Signature
Total Accounted for

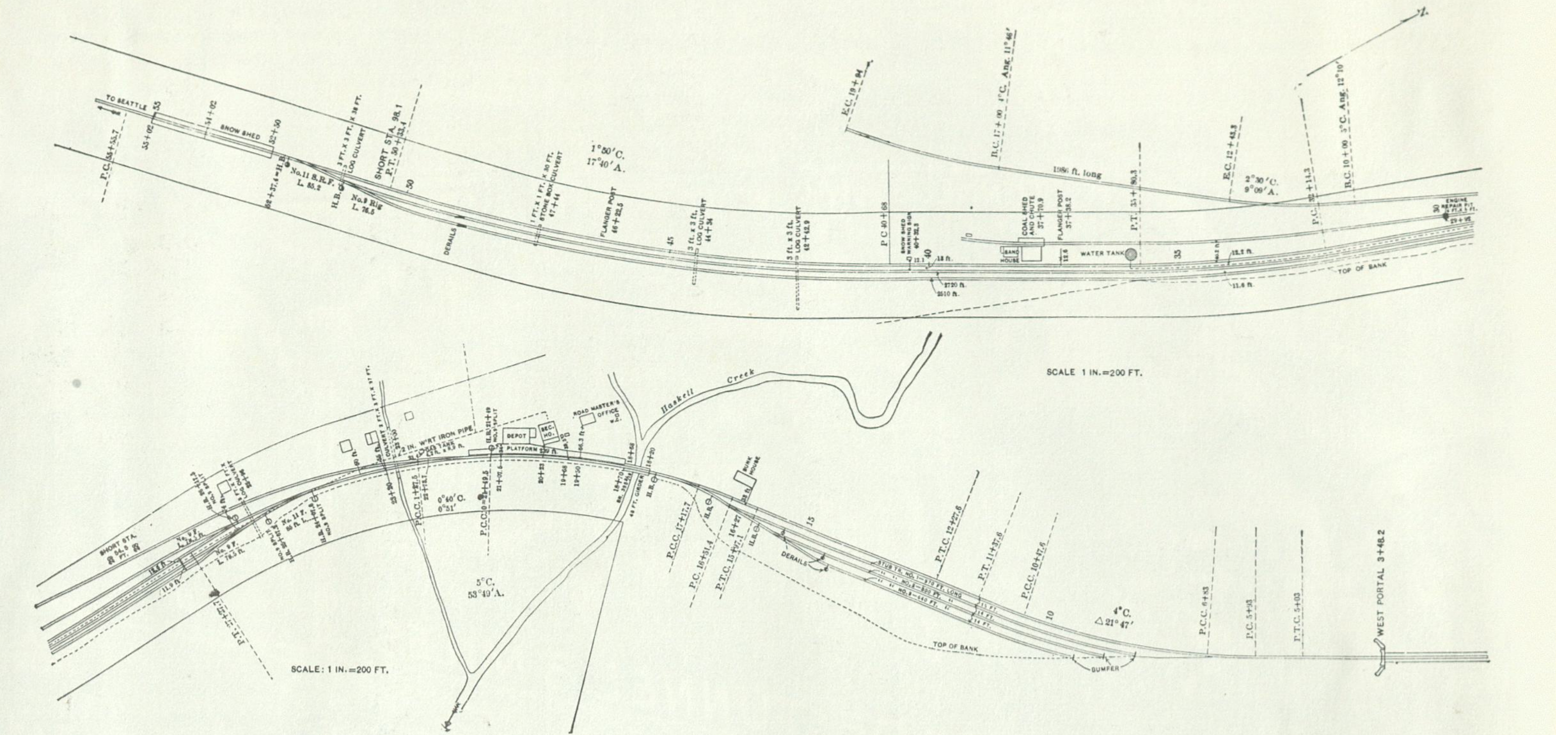
140



**THE STATION AT WELLINGTON** is shown in this photograph taken in the early 1900's by Mr. Harrison Usher a telegrapher on the GN and assigned to Wellington. Wellington had just one reason for its existence—the railroad. Located high in the Cascade mountains and removed from contact with the rest of world except by railroad it was a remote yet busy spot the year around with all the traffic moving east and west funneled through its small yards. After the disaster of 1910 the railroad changed the name of the town to Tye and rebuilt all of the facilities that had been wiped out by the avalanche.

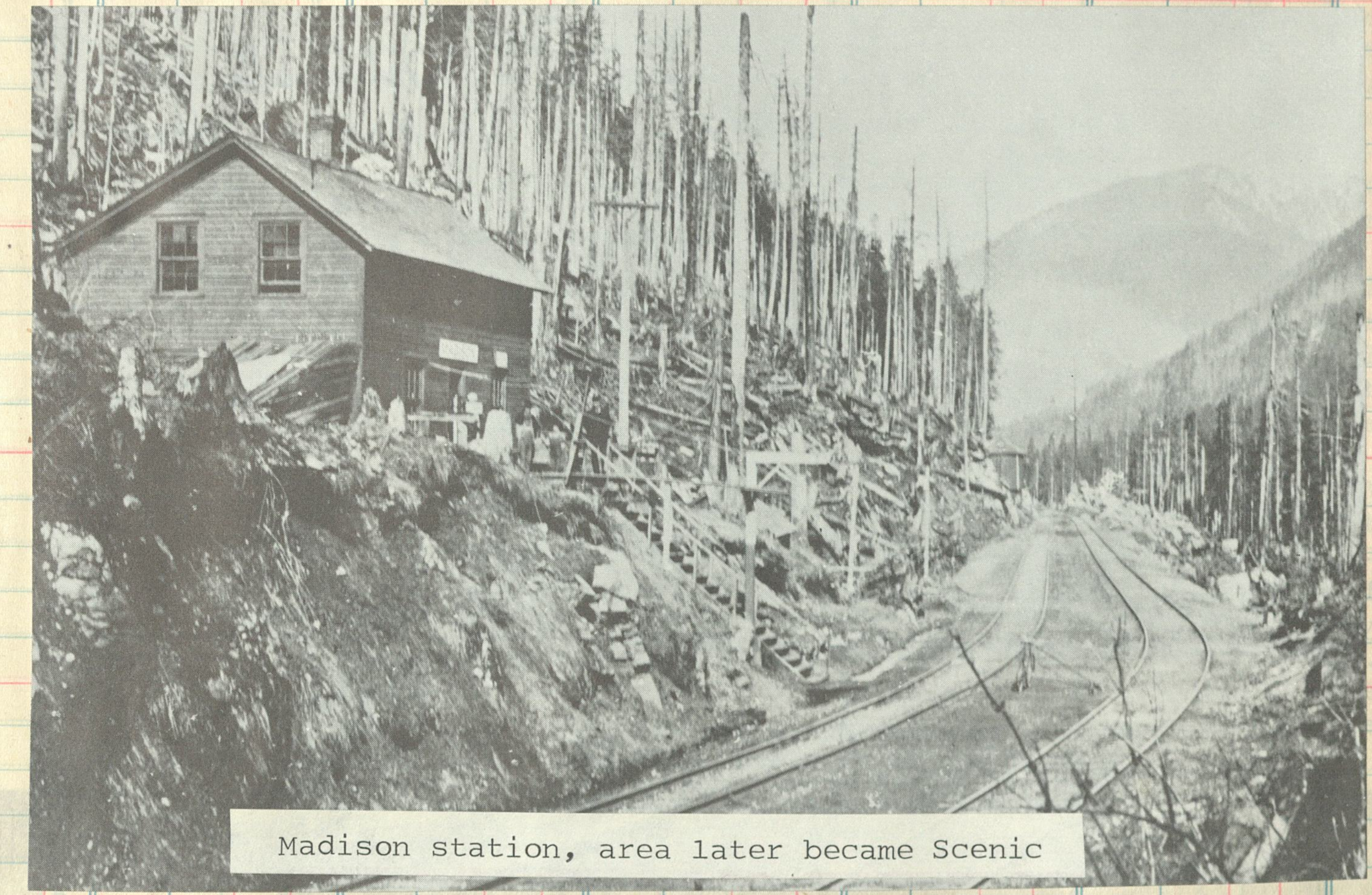
The quarters behind the station were relatively deserted during the summer months, but during the winter, were filled to capacity with rotary plow crews, helper engine crews, extra section men, operating personnel, and a multitude of specialists whose jobs were maintaining, operating and supervising one of the toughest operating districts to be found in the U.S. and Canada. Twelve and sixteen hour days for the crews and operating personnel were standard procedure and twenty four hour days were not uncommon when the line was blocked by snow and slides. (Harrison Usher)

Amount



—Plan of Wellington yard showing tracks. The main track through the snow shed and two side tracks are electrified. Total length of track electrified, about 10,500 ft.

1909

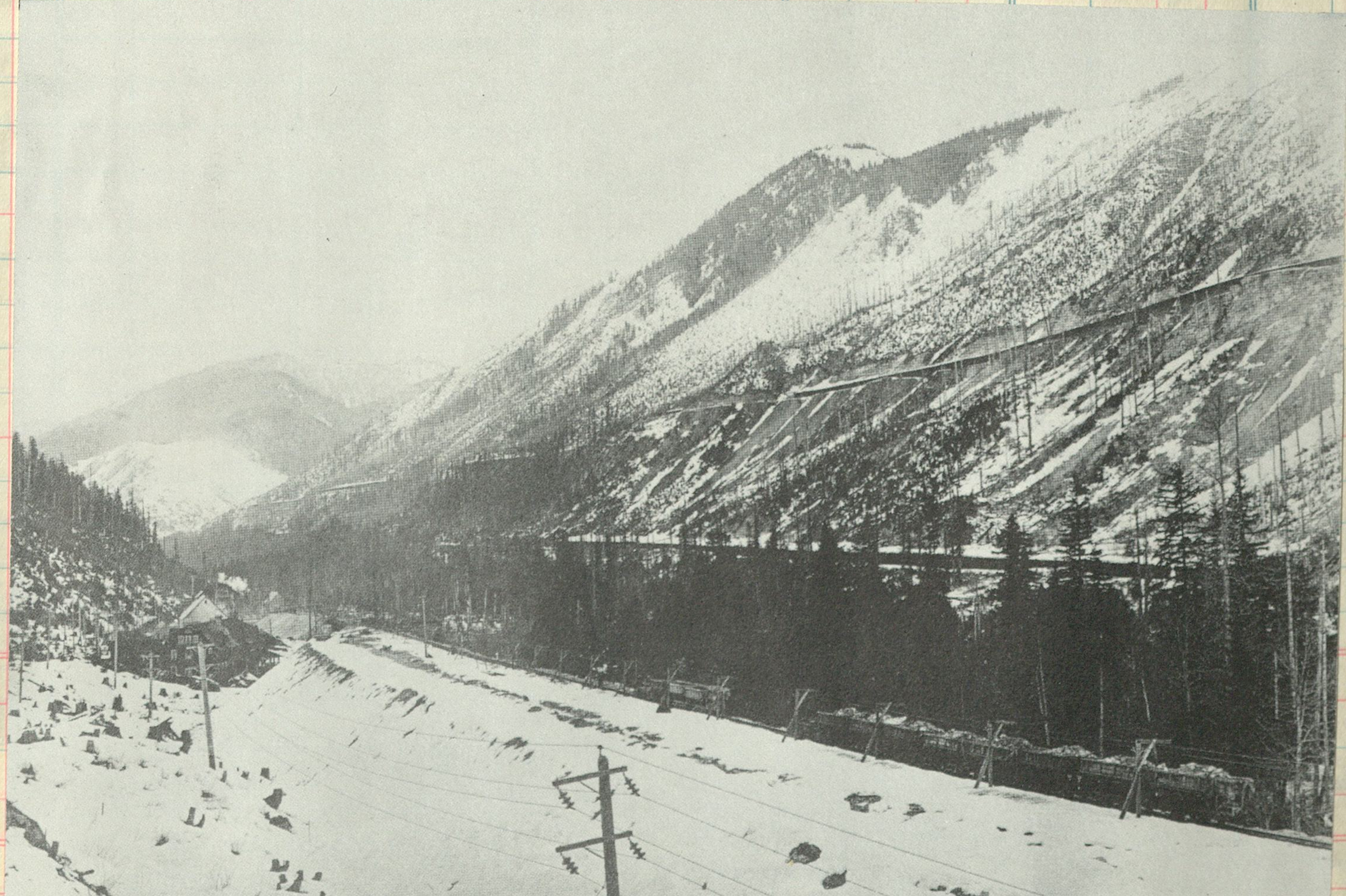


Madison station, area later became Scenic

Agent's Signature

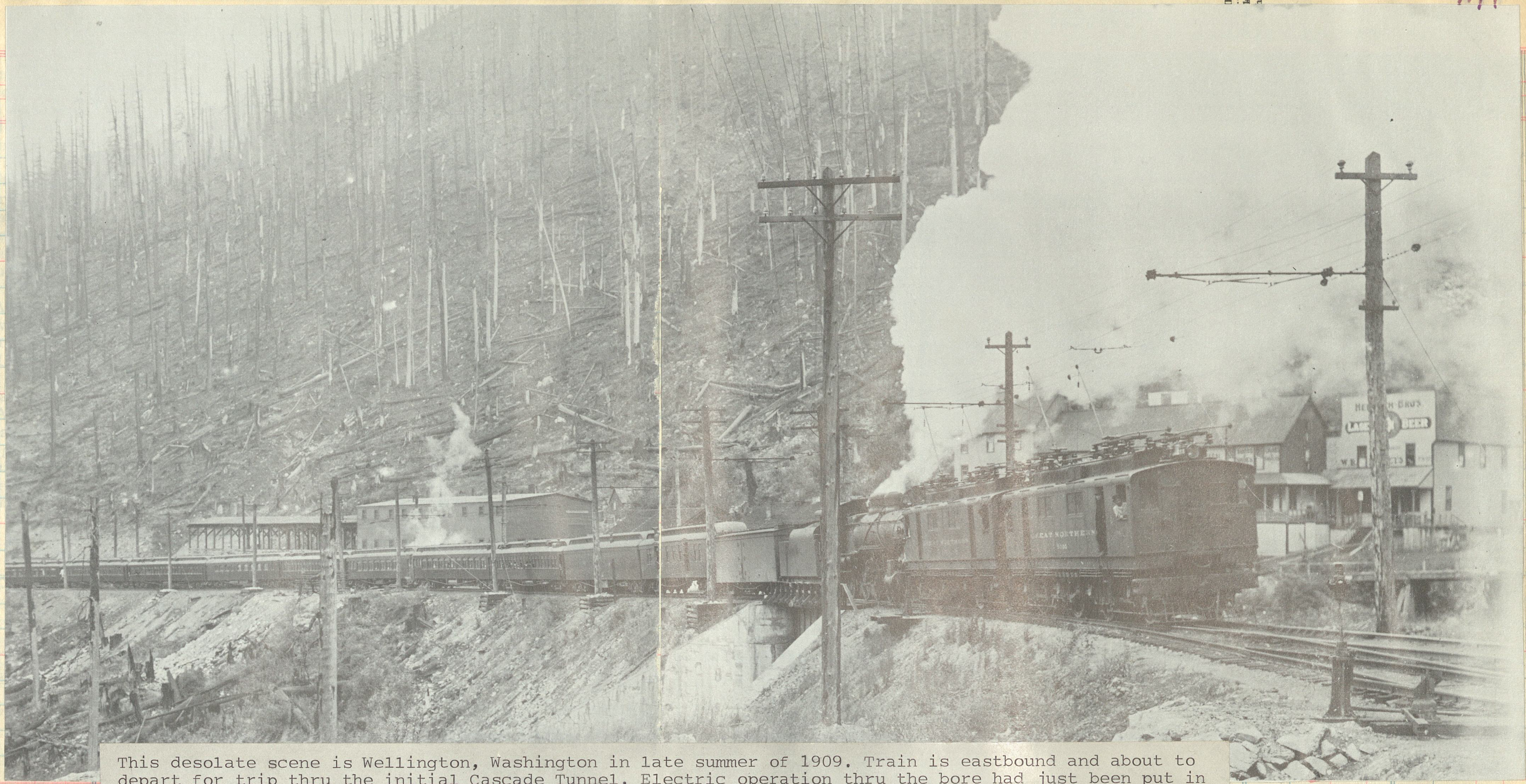
With spring in the air the snow has started to fade from the right of way as a eastbound freight, after crossing over the upper Martin Creek trestle, works its way up the hill to Wellington.

Total Accounted for



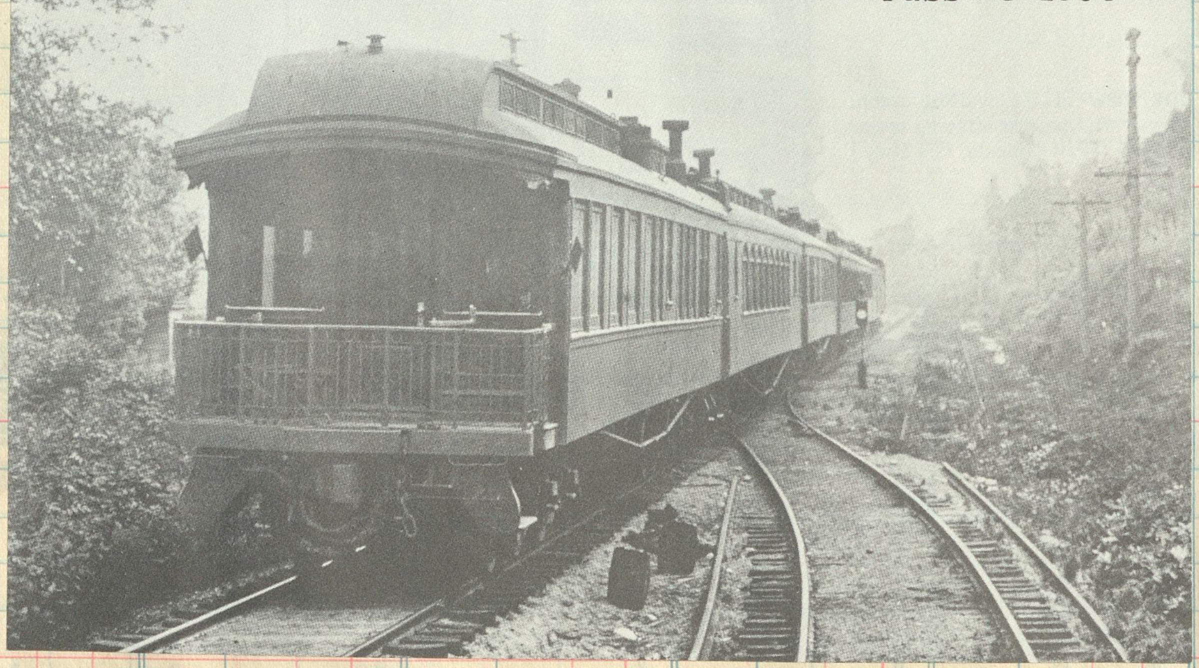
**DUMP CARS FROM THE TUNNEL,** pushed by little electric "mules," are being spotted along the fill at Scenic that is now so high the old water tower is almost hidden from sight. The gap in the fill by the hotel has been left in order that trains can duck under the gap and continue on the old mainline curving back across the valley. On the other side of the valley immediately across from Scenic, the railroad, largely hidden from sight by the snowsheds, resembles the burrowing and tunneling of a giant mole. Looking down the valley of the Tye river towards Skykomish the snowsheds seen through the trees gradually disappear from sight going towards the lower trestle at Martins Creek. Above this point the railroad reappears climbing back towards Scenic several hundred feet higher now. The need for the snowsheds is obvious in the photo. The avalanche area is clearly visible as scars running down the side of the mountain. (Lee Pickett)

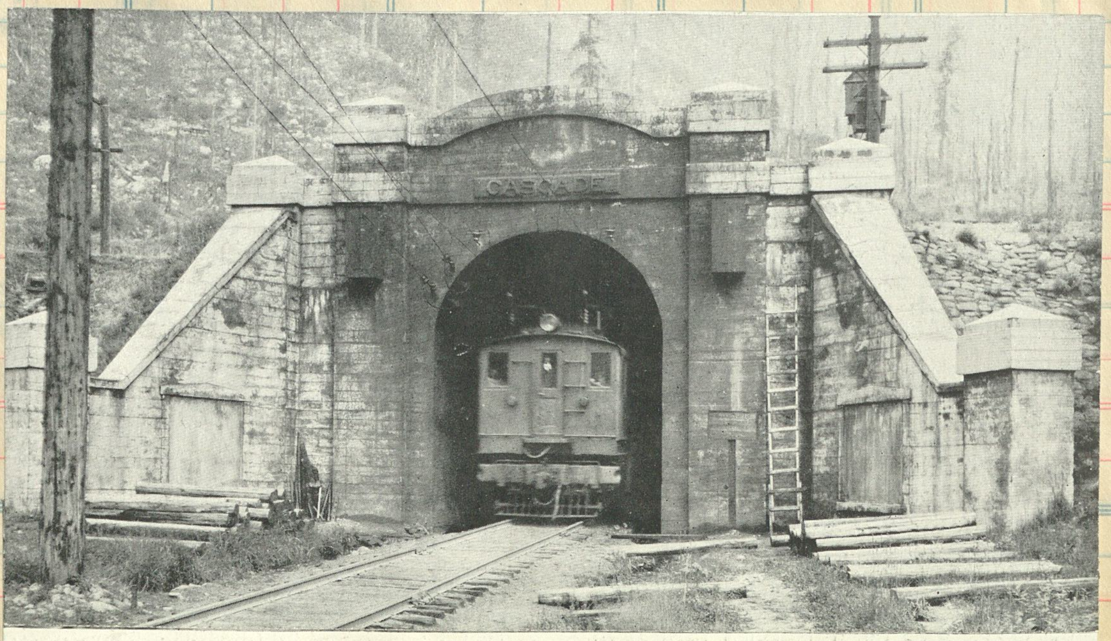
Clos. No. | Sold | Amount | Clos. No.



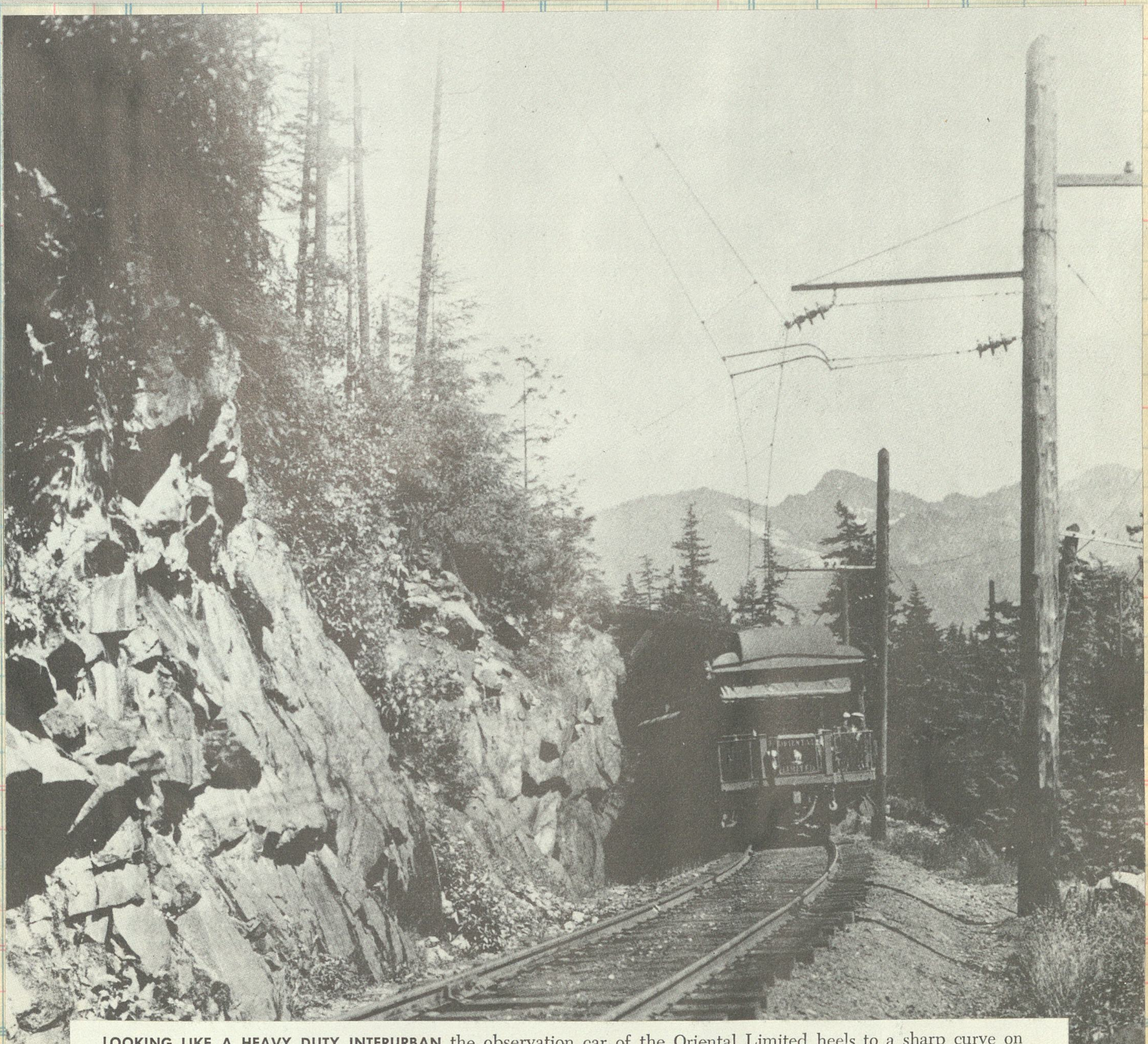
This desolate scene is Wellington, Washington in late summer of 1909. Train is eastbound and about to depart for trip thru the initial Cascade Tunnel. Electric operation thru the bore had just been put in service and the two box motors had just been delivered by Schen-GE. Disaster struck this location on March 1st 1910 when a massive snow slide roared down the slope at left in this photo. Two passenger trains, Nos 25 & 27, stalled by the deep snow and in the path of the slide were destroyed. Edge of the slide in area of fifth and sixth car; everything to the left, including the large electric engine shed, was demolished. Service was cut for over a week and the G.N. changed name of Wellington to Tye.

Trn #1 dropping down west slope of Cascades below Stevens Pass c 1904





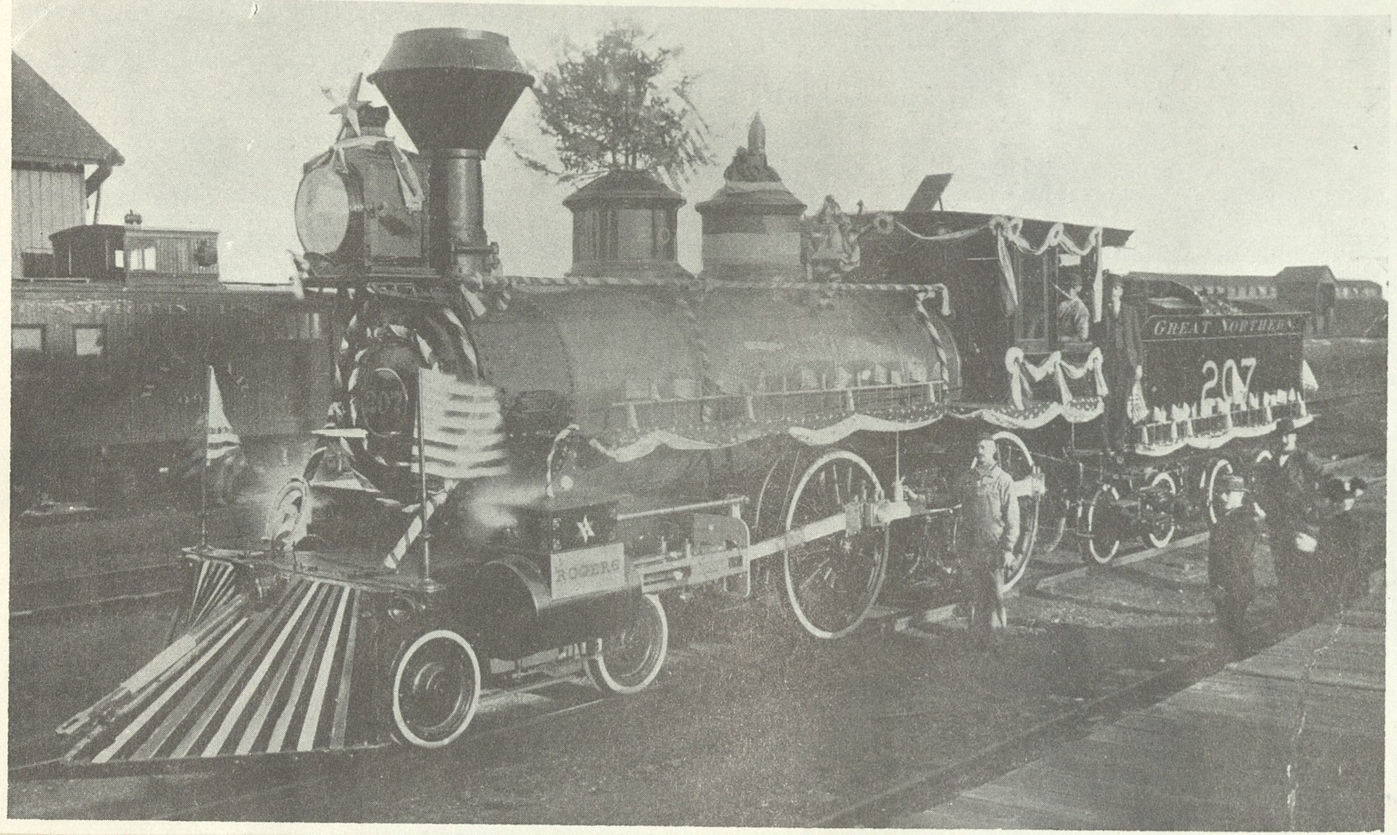
THE WESTERN MOUTH OF THE first CASCADE TUNNEL, SHOWING ELECTRICALLY-DRAWN TRAIN EMERGING.

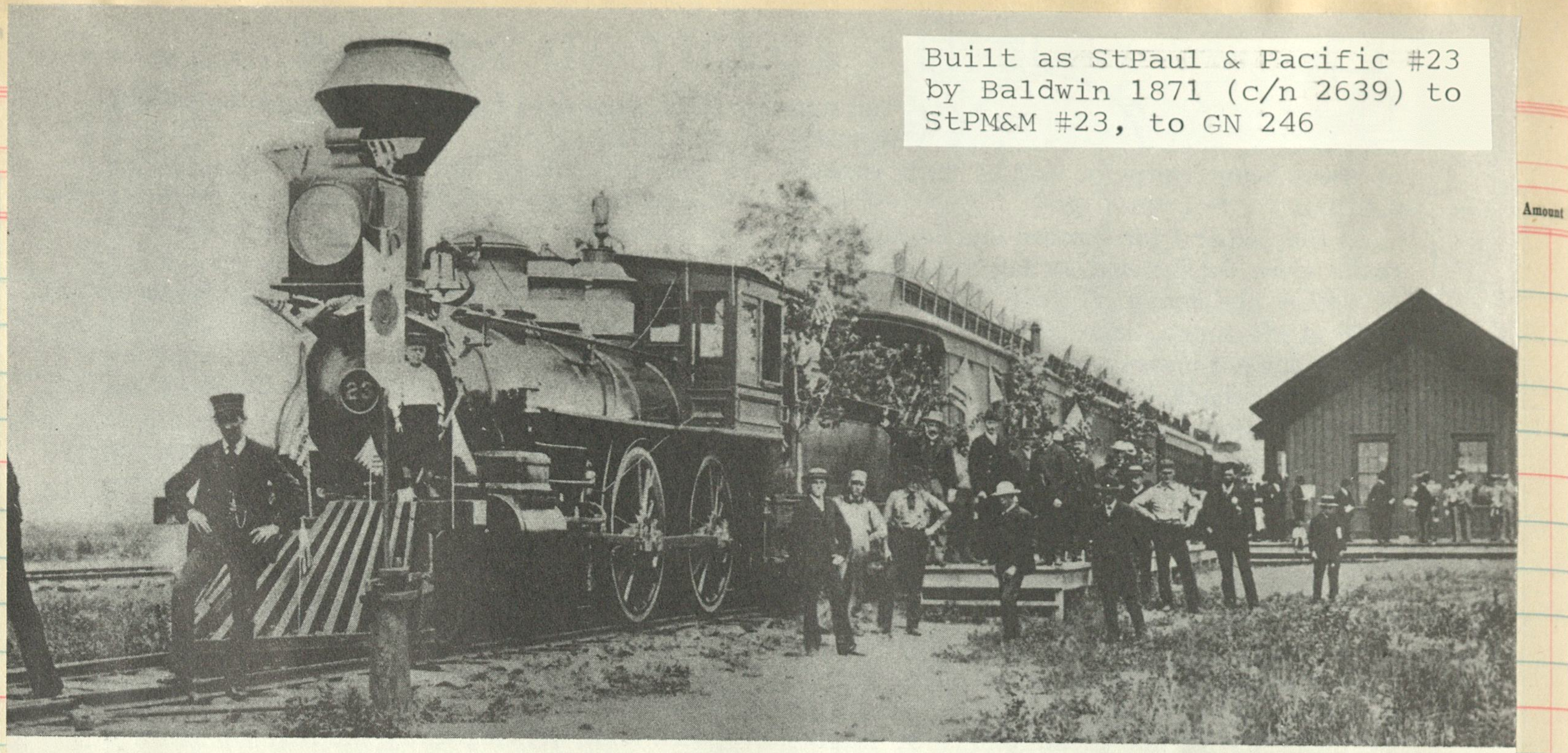


**LOOKING LIKE A HEAVY DUTY INTERURBAN** the observation car of the Oriental Limited heels to a sharp curve on the old line up to Tye in this 1928 scene. In 1924 the GN updated the Oriental Limited with new Pullman built equipment including seven new compartment observation cars all named in the "Great" series. These cars were the last open observation cars built for the GN and among the first observations to be built with higher windows for better viewing and lighting in the observation end of the car. As train speeds gradually increased the open platform was becoming more dangerous to passengers and further lacked the capability of mid-train operation. Clearances in snowsheds, tunnels and station platforms was tight in many cases and an unwary or foolhardy passenger could be injured when hanging out beyond the sides of the car. Observation equipment that followed, known as solarium-observation cars, were entirely enclosed. (Lee Pickett)

142

**PATRIOTIC PRIDE** is reflected in this decorated American Standard, resplendent with polish, flags, rosettes, bunting, and evergreens. The engine is the Great Northern's No. 207, and the occasion was a 4th of July celebration in the 1890's, the photo being taken at Barnesville or Crookston, Minnesota. The 4-4-0 was built by Rogers at Paterson, New Jersey, in 1887. Note the side-door caboose, or way car, No. 09, in the left background. The term, way car, was seldom applied to cabooses on lines along the Pacific Coast, the expression there referring to the car for local or way freight which was customarily kept on the head end of freight trains.
(Courtesy of Great Northern Railway)

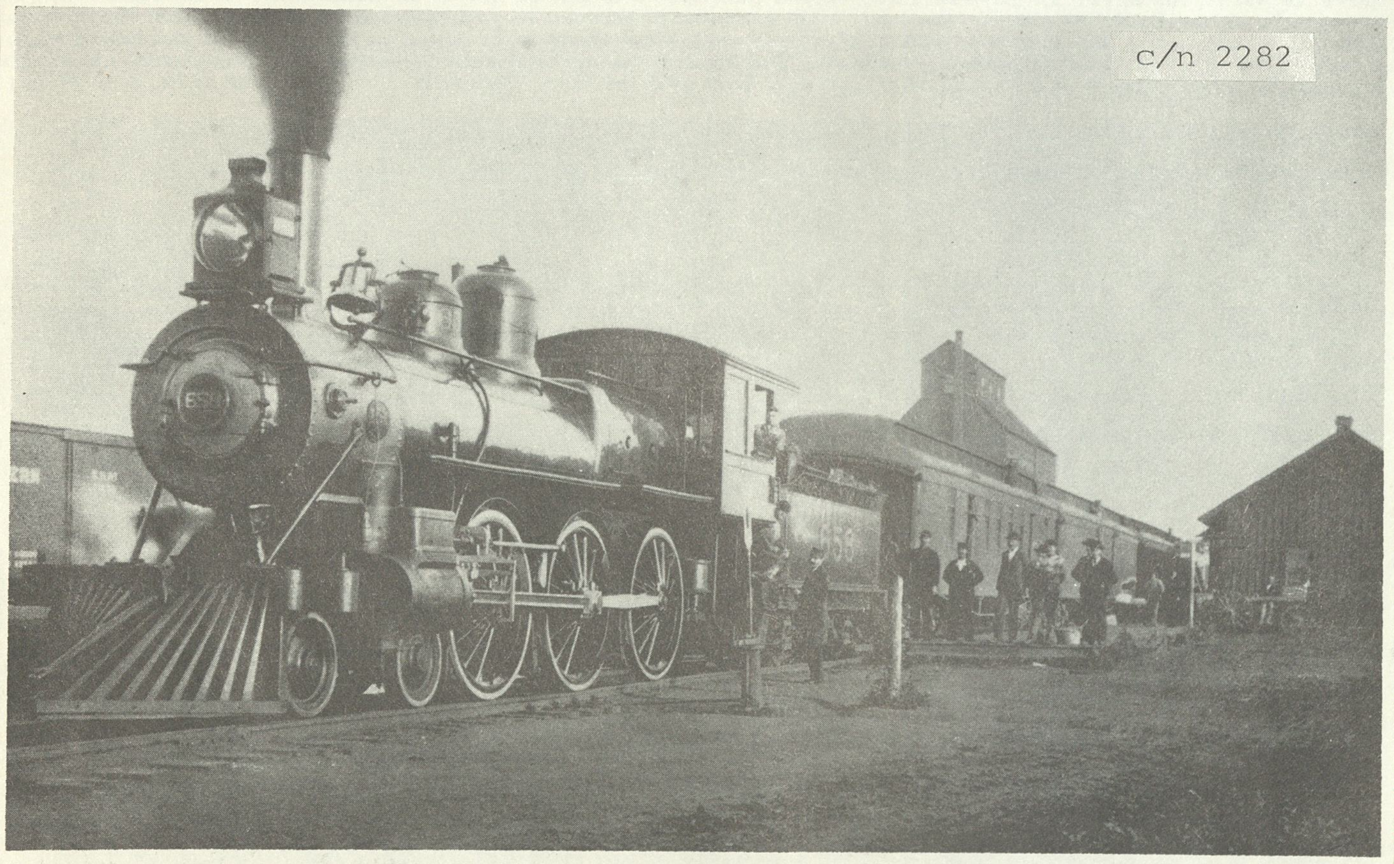

GREAT NORTHERN
207
ROGERS


Built as StPaul & Pacific #23
by Baldwin 1871 (c/n 2639) to
StPM&M #23, to GN 246

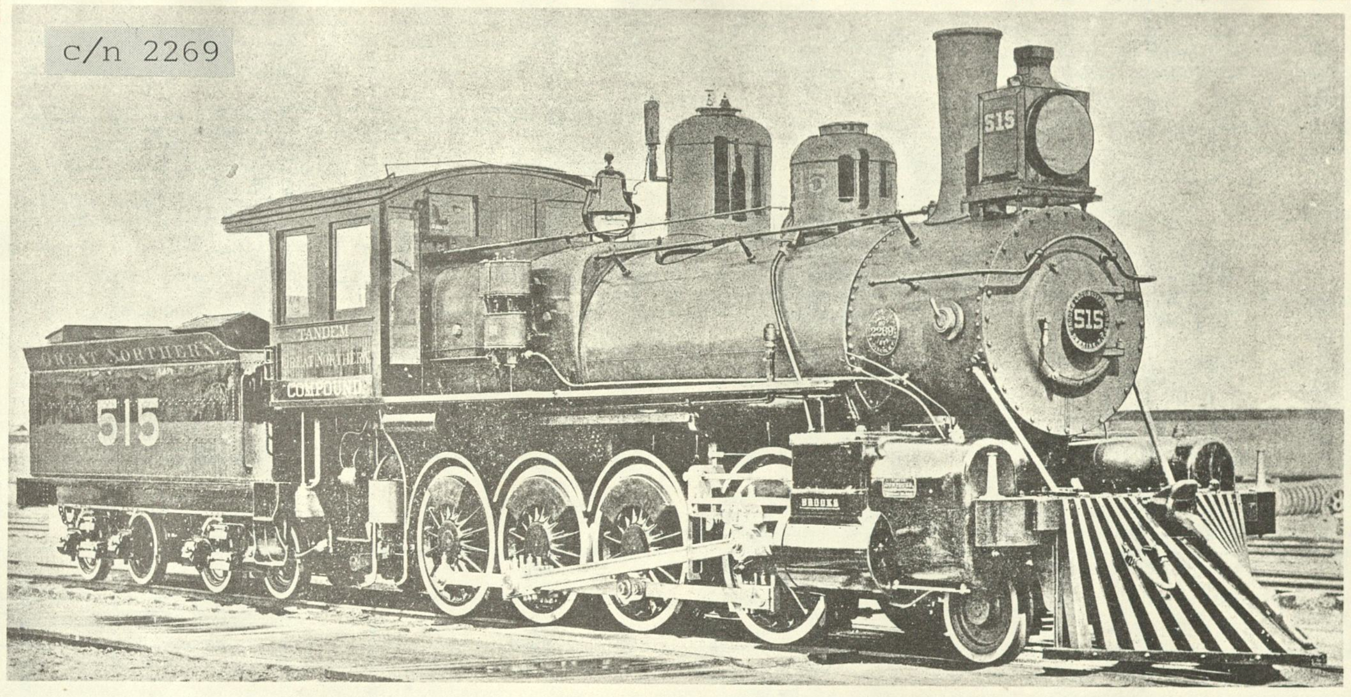
**MEMORABLE DAY** in the history of Devils Lake, North Dakota, was July 4th' 1883. The first train of the St. Paul, Minneapolis & Manitoba Railway rolled into town behind Engine 23, a trim three-domed American Standard. Flags, pennants, and evergreens decorated the engine and cars, and the townsfolk turned out to give the pioneer railroaders a hearty welcome. The uniform cap on the head of the conductor indicates that some of the niceties of Eastern operations have invaded the informal regions of the West.
(Courtesy of Great Northern Railway)

**GREAT NORTHERN RAILWAY's** No. 658 is shown here at Devil's Lake, North Dakota, in the 1890's, backed by the frame depot and one of the towering grain elevators that rose like monuments along the "Big G" lines through the grain belt. The fireman seated in the cab is the late Alvanley Johnson, who for many years held the helm of the Brotherhood of Locomotive Engineers; as he takes a brief respite here from his labors with scoop, he perhaps little dreams that some day he will be elevated to the position of Grand Chief Engineer of that old and honored railroad labor organization. The big 4-6-0 with the Belpaire boiler was built by the Brooks Locomotive Works in 1893; she had 19 x 26 inch cylinders and 73 inch drivers, suited for fast stepping with the varnished cars across the Dakota plains. A sister engine of the locomotive shown here, Great Northern's No. 650, was exhibited at the Chicago World's Fair in 1893, along with a number of other locomotives representing the acme of railroad motive power in use at the time. Devil's Lake, located in North Dakota's Ramsey County, is on the G.N. main line from Crookston west to the Pacific, and in the heart of the "picket fence" region, a district so named because the numerous Great Northern branch lines running toward the Canadian line appear on maps in such profusion as to resemble a picket fence.
(Courtesy of Fred Jukes)

c/n 2282

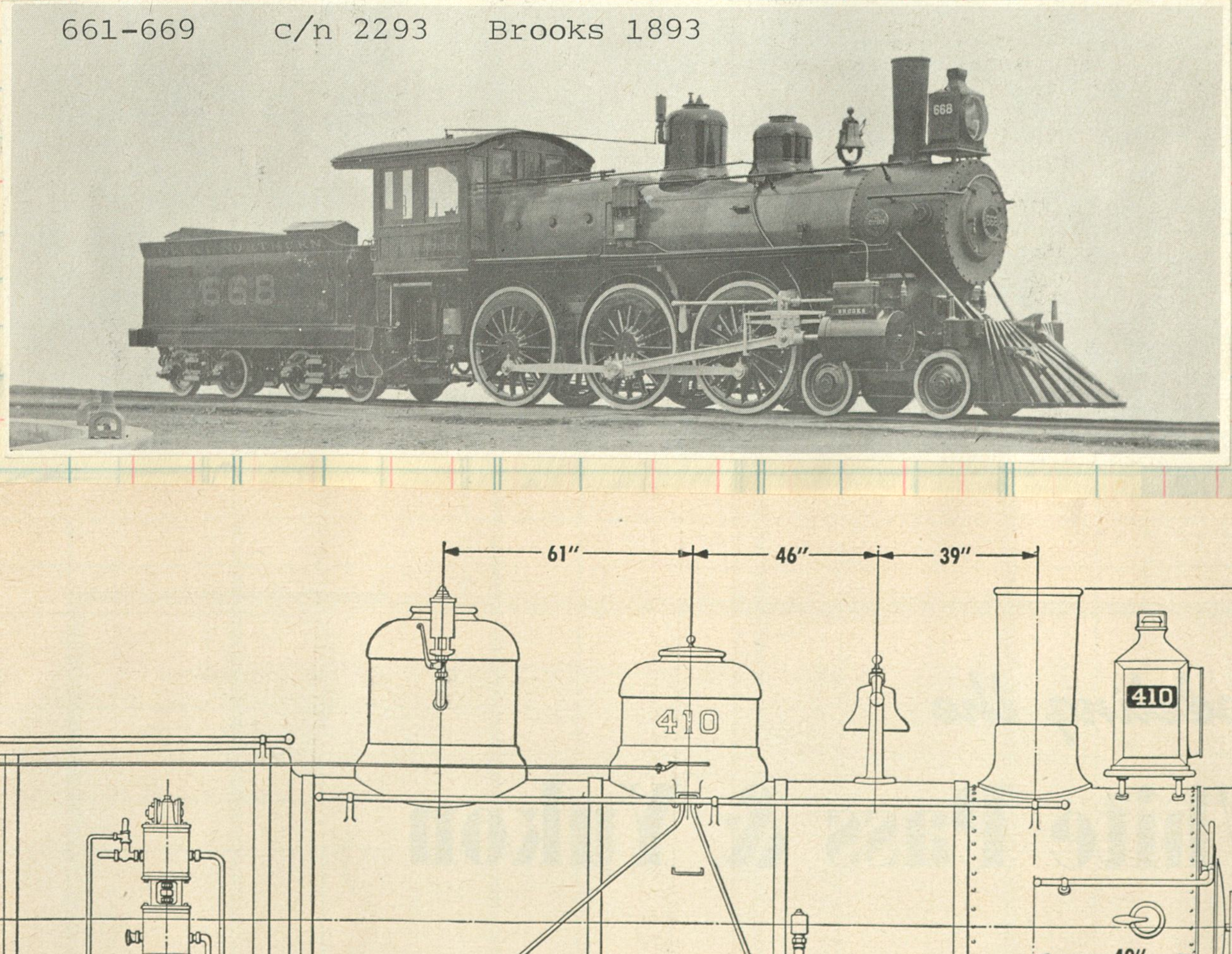


c/n 2269

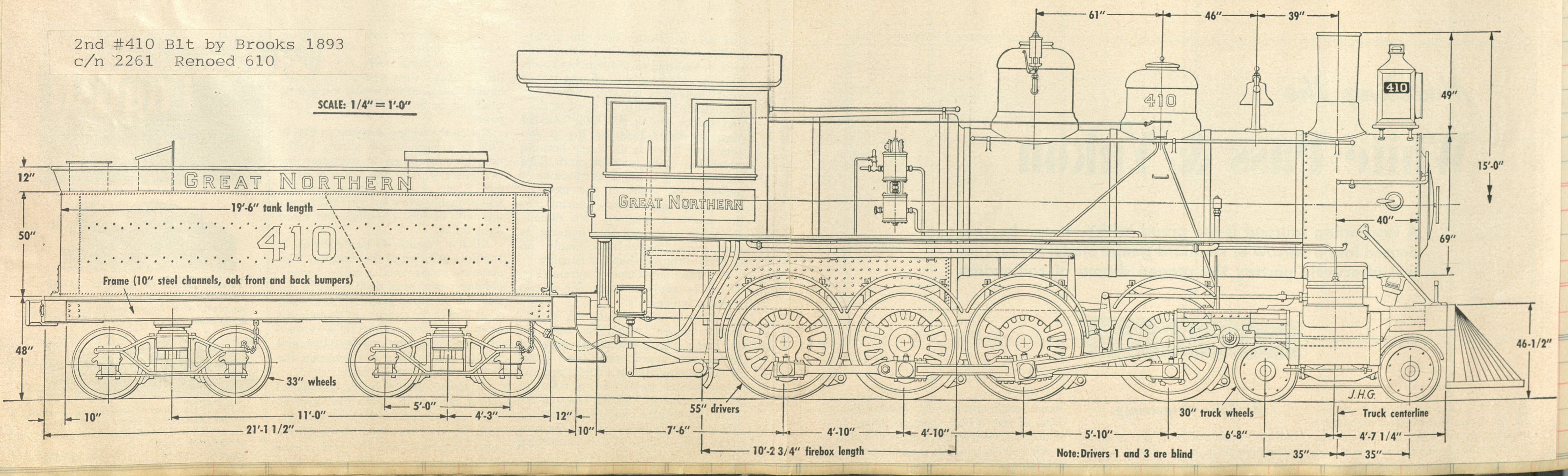

515
GREAT NORTHERN
515
TANDEM
COMPOUND
515
BROOKS

Great Northern tandem compound freight locomotive No. 515, built by the Brooks Locomotive Works in April 1893.

661-669 c/n 2293 Brooks 1893

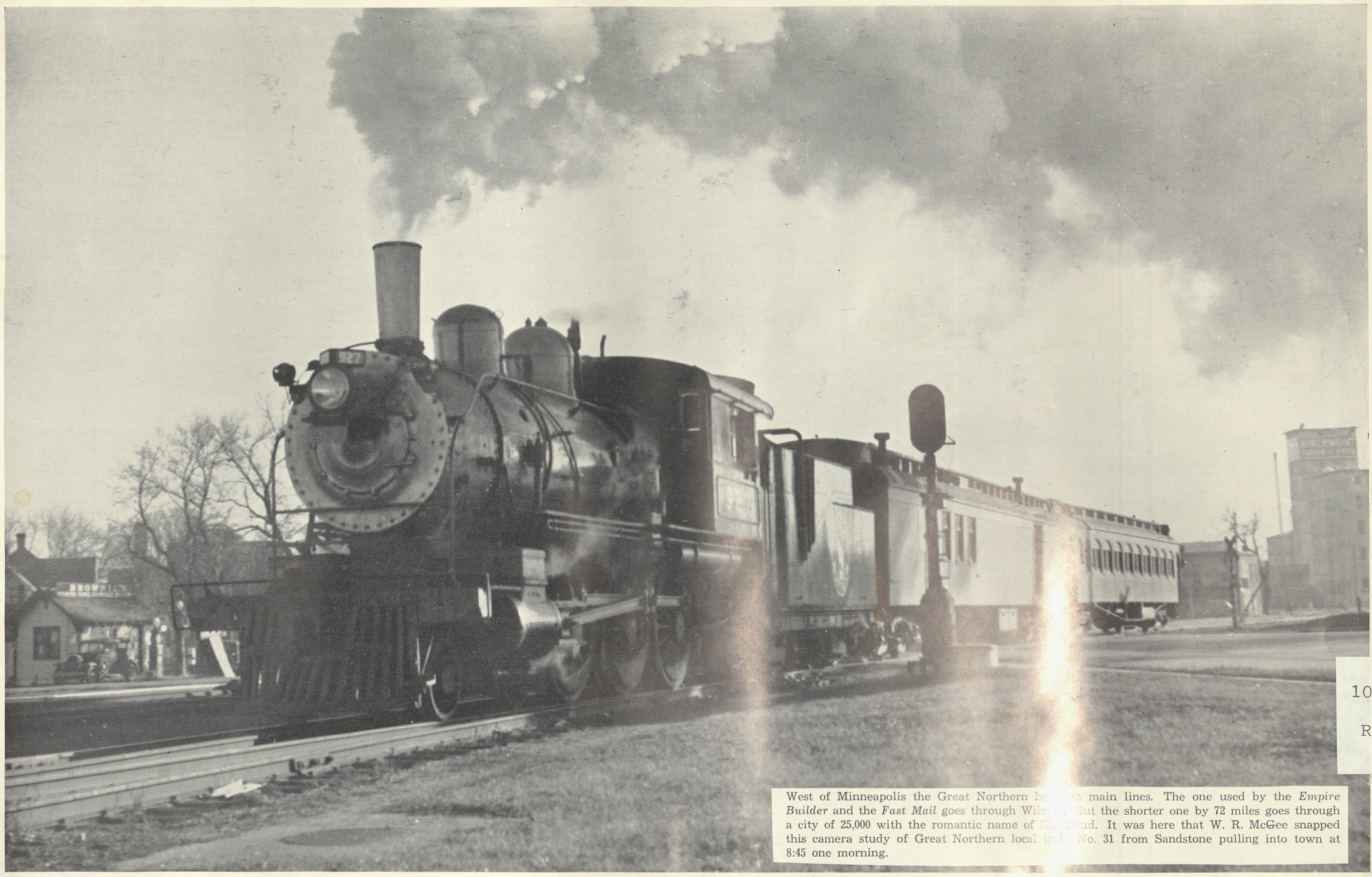


2nd #410 Blt by Brooks 1893
c/n 2261 Renoed 610


SCALE: 1/4" = 1'-0"
GREAT NORTHERN
GREAT NORTHERN
410
410
410
12"
50"
48"
19'-6" tank length
Frame (10" steel channels, oak front and back bumpers)
33" wheels
10"
11'-0"
5'-0"
4'-3"
12"
21'-1 1/2"
10"
7'-6"
55" drivers
10'-2 3/4" firebox length
4'-10"
4'-10"
5'-10"
6'-8"
30" truck wheels
Truck centerline
4'-7 1/4"
35"
35"
Note: Drivers 1 and 3 are blind
J.H.G.
61"
46"
39"
49"
15'-0"
40"
69"
46-1/2"

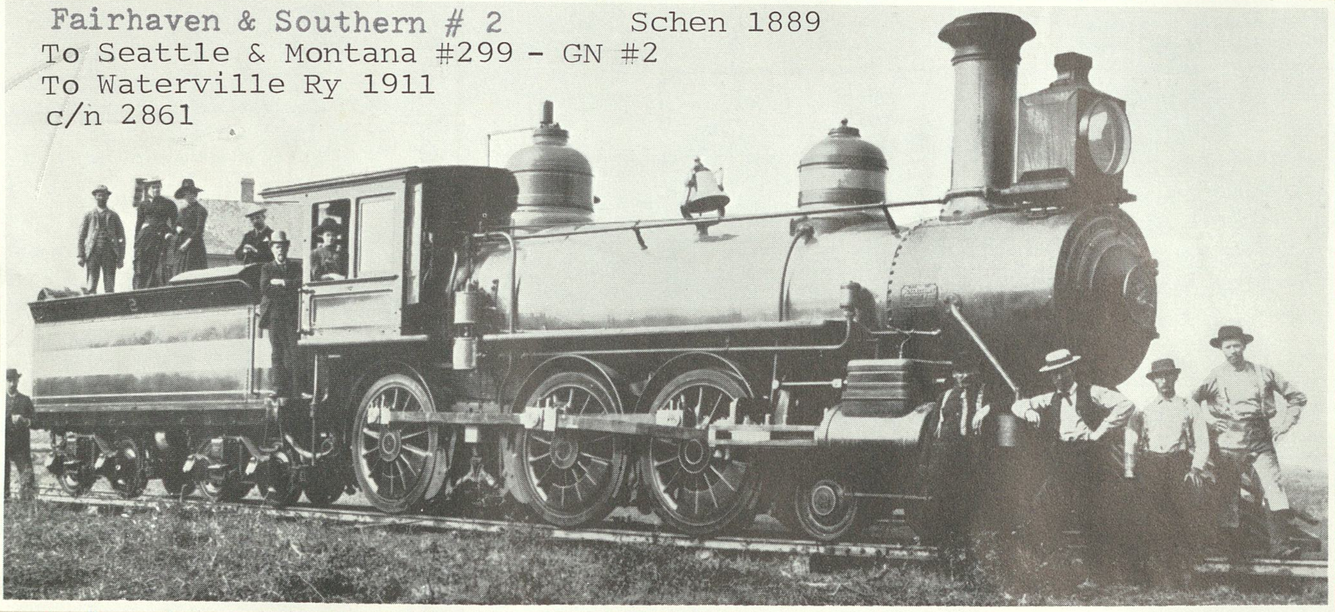
Clos. No. Sold Amount Clos. No.

Amount Clos. No. Sold Amount

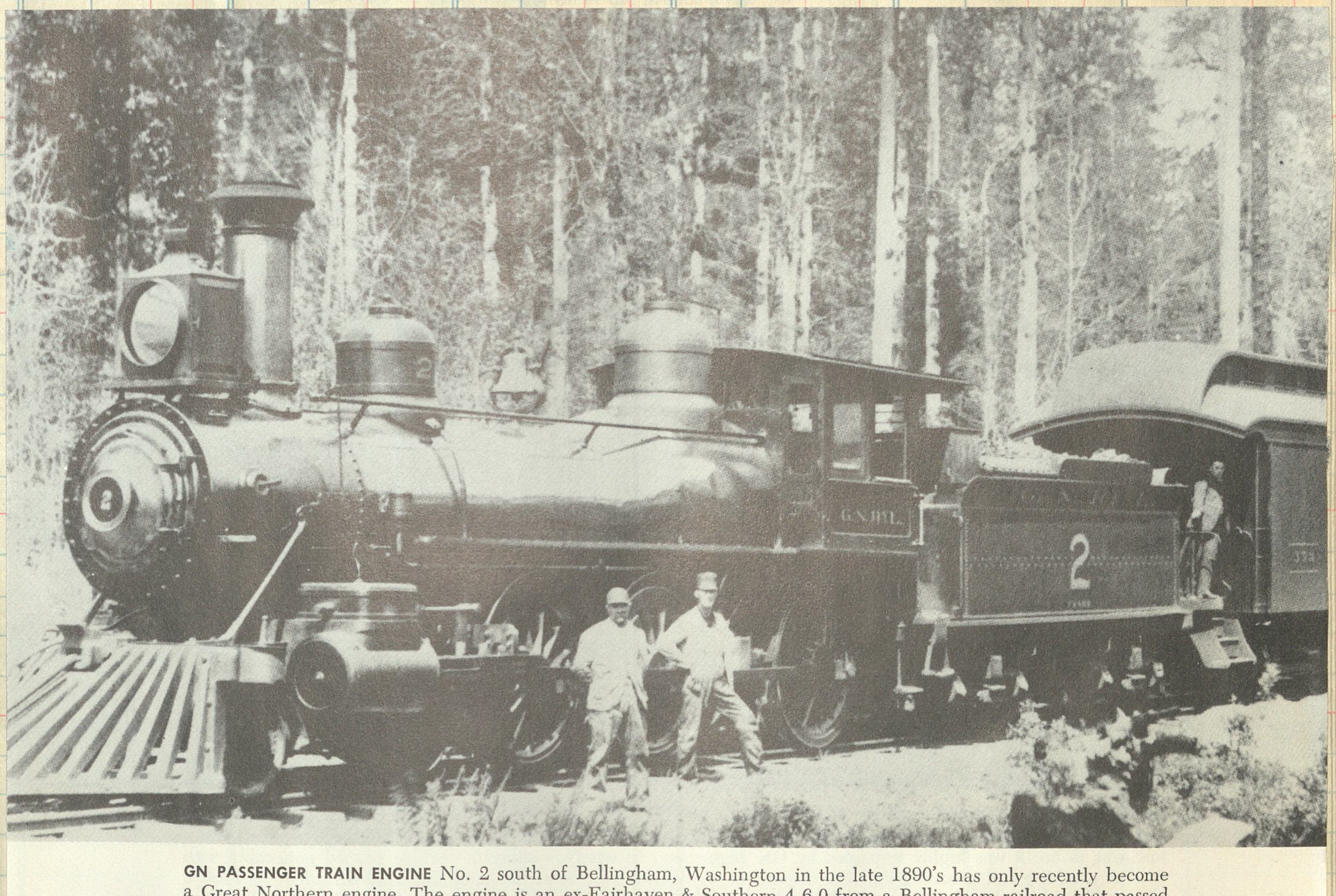


West of Minneapolis the Great Northern has two main lines. The one used by the *Empire Builder* and the *Fast Mail* goes through Willmar. But the shorter one by 72 miles goes through a city of 25,000 with the romantic name of St. Cloud. It was here that W. R. McGee snapped this camera study of Great Northern local train No. 31 from Sandstone pulling into town at 8:45 one morning.

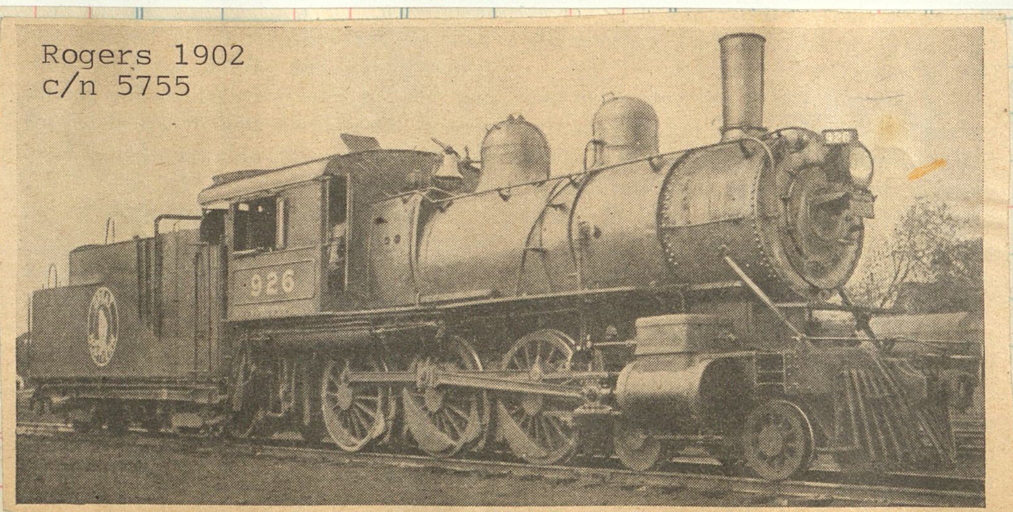
10 wheeler #927
925-939
Rogers 1902
Class E-6



Fairhaven & Southern # 2 Schen 1889
To Seattle & Montana #299 - GN #2
To Waterville Ry 1911
c/n 2861

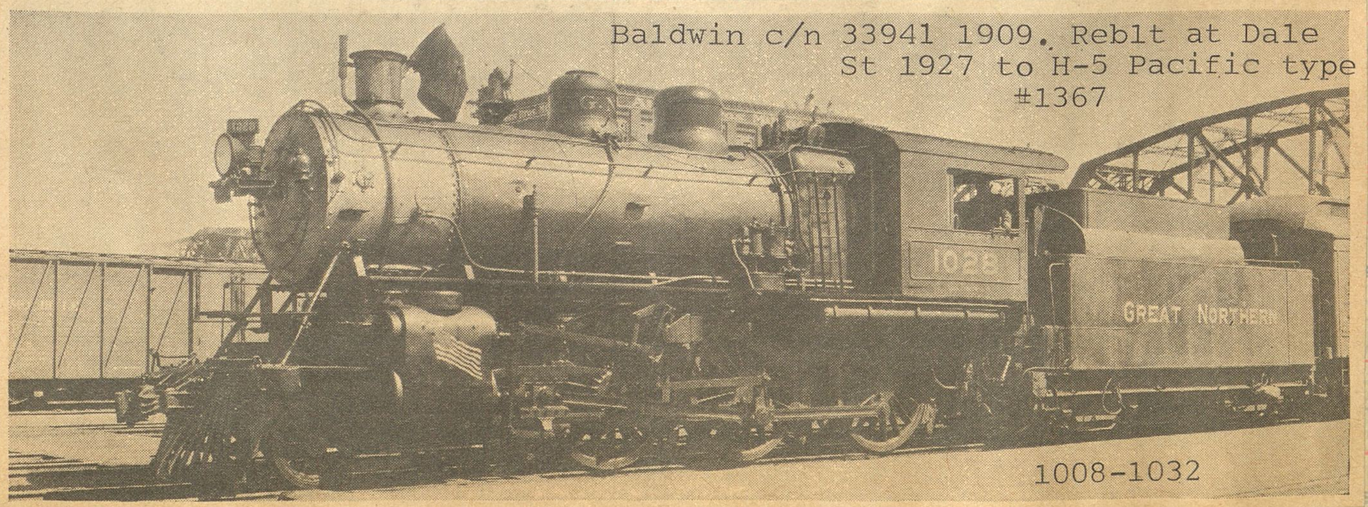


**GN PASSENGER TRAIN ENGINE** No. 2 south of Bellingham, Washington in the late 1890's has only recently become a Great Northern engine. The engine is an ex-Fairhaven & Southern 4-6-0 from a Bellingham railroad that passed into the hands of James J. Hill in 1890 connecting with another Hill subsidiary, the Seattle & Montana Railroad.



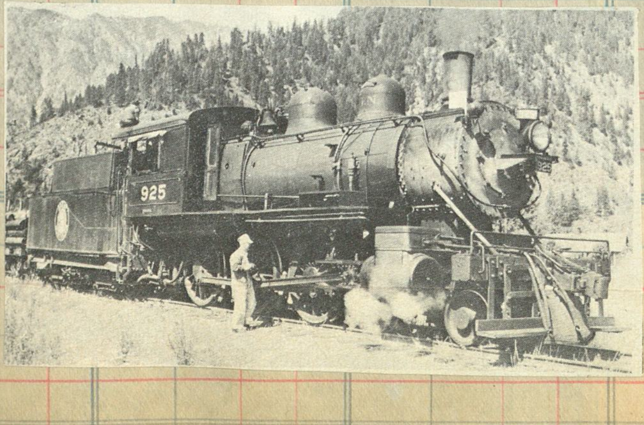
Rogers 1902
c/n 5755

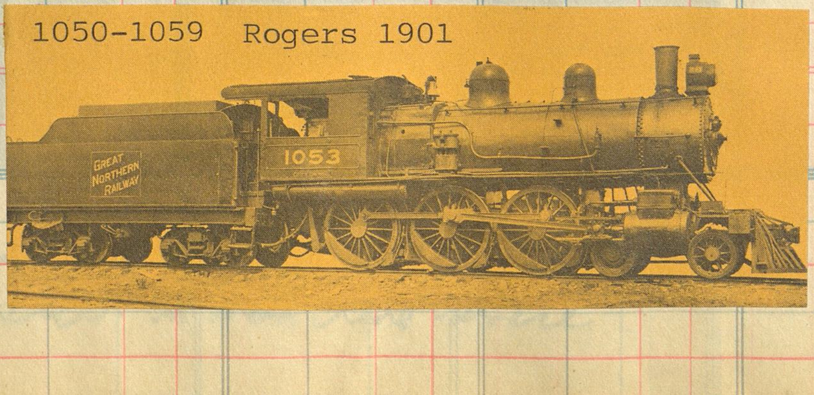
Photo by Roy Peterson, Rural Rte. 3, Belvidere, Ill.



Baldwin c/n 33941 1909. Reblt at Dale
St 1927 to H-5 Pacific type
#1367

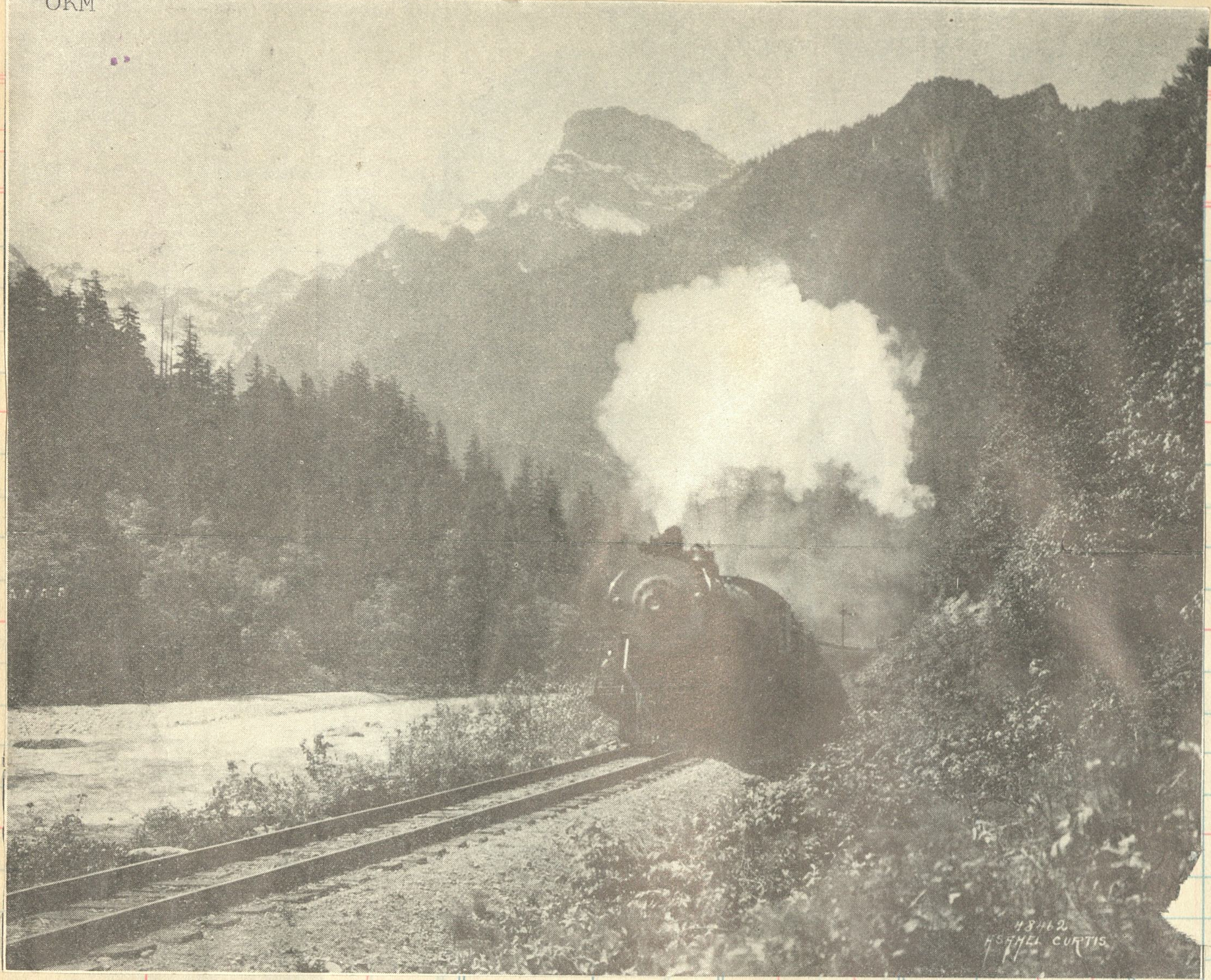
1008-1032





1050-1059 Rogers 1901

OKM



1750-1764
LIMA 1914
c/n 1369

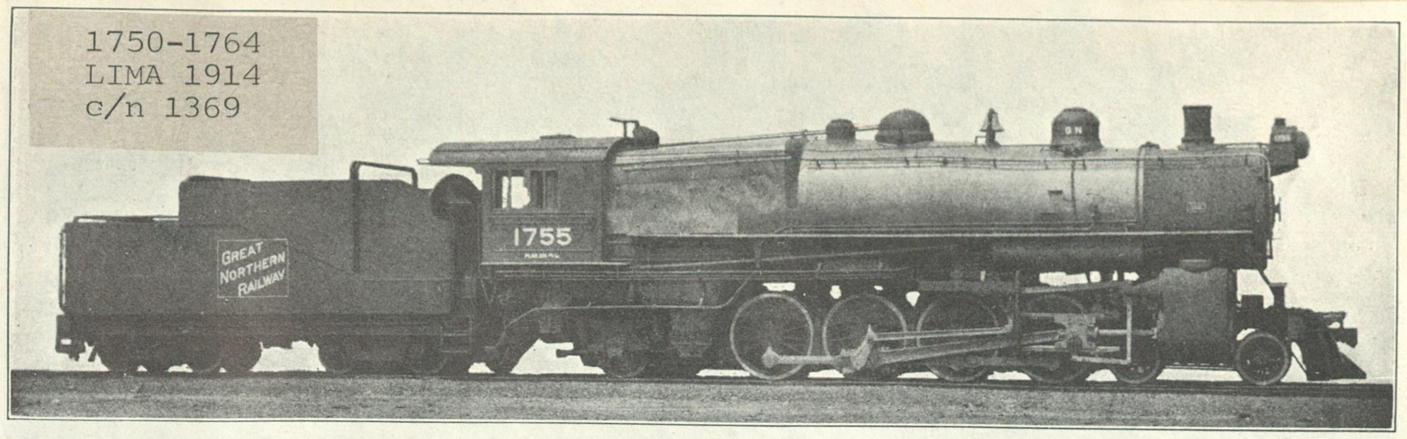
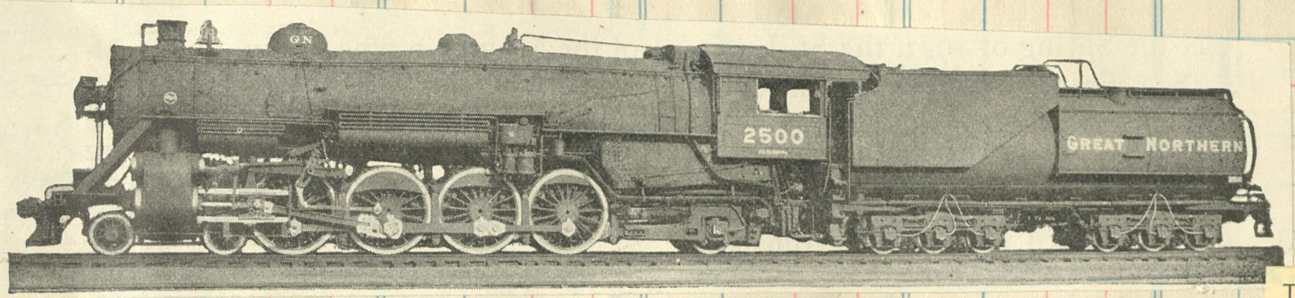
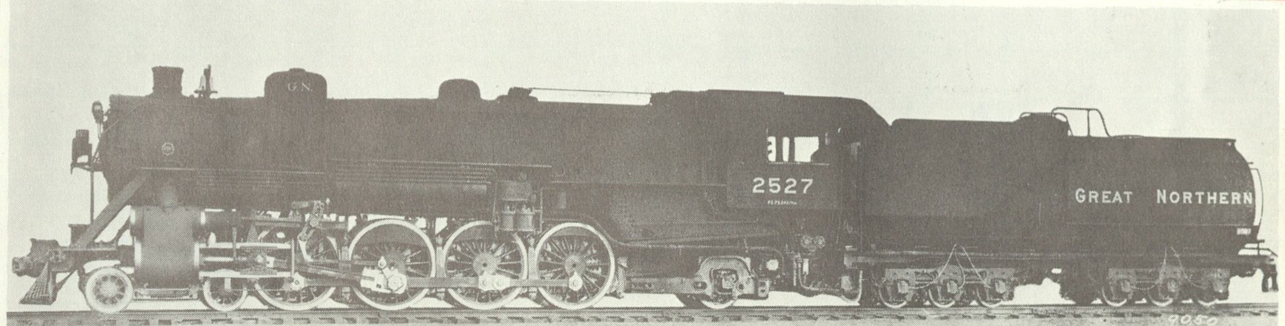


**Fig. 73**—Mountain Type (4-8-2) Locomotive for Passenger Service. Built for the Great Northern by the Lima Locomotive Corporation. Cylinders, 28 in. x 32 in. Steam Pressure, 180 lbs. Diameter of drivers, 62 in. Tractive Effort, 61,900 lbs. Heating Surface—Tubes, 4,200 sq. ft.; Firebox, 340 sq. ft.; Total, 4,540 sq. ft.; Superheater Surface, 1,075 sq. ft. Grate Area, 78 sq. ft. Wheel Base—Driving, 16 ft. 9 in.; Total, 38 ft. Weight on Drivers, 218,000 lbs. Total Weight of Engine, 326,000 lbs. Fuel, Soft Coal. Reblt 1928 at Great Falls to 2-10-2 #2180

Clos. No. Sold Amount



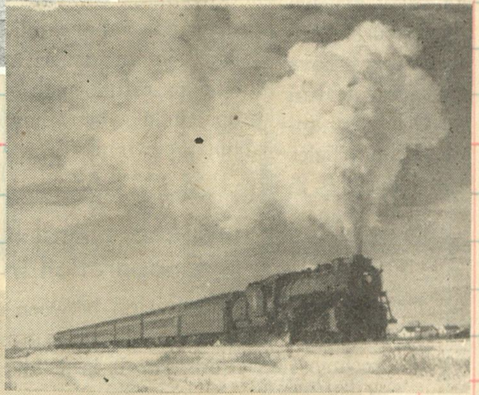


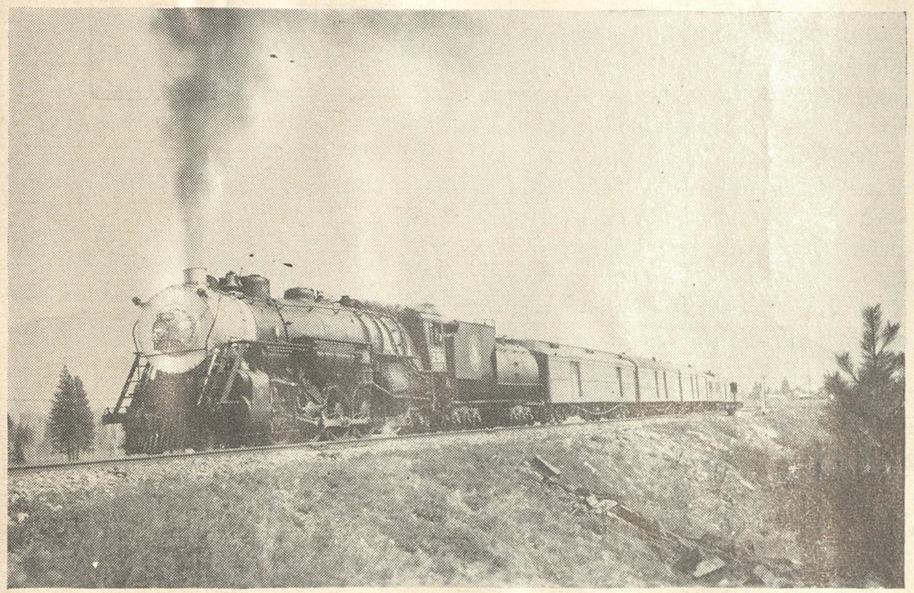
Baldwin 1923 c/n 57347

In the fall of 1923 Baldwin delivered twenty eight 4-8-2's noed 2500-2527 class P-2 and most remained in service until mid fifties.

MOUNTAIN TYPE LOCOMOTIVE, GREAT NORTHERN RAILWAY

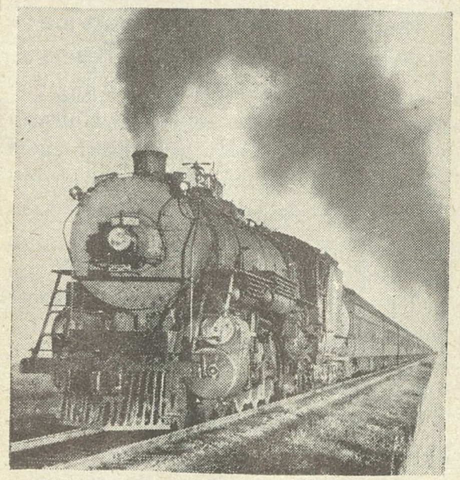
Cylinders, 29″ x 28″
Driving wheels, diameter, 73″
Steam pressure, 200 lb.
Grate area, 88 sq. ft.
Water heating surface, 4,971 sq. ft.
Superheating surface, 1,368 sq. ft.
Weight on drivers, 238,000 lb.
Weight, total engine, 357,000 lb.
Tractive force, 54,830 lb.





W. R. McGee

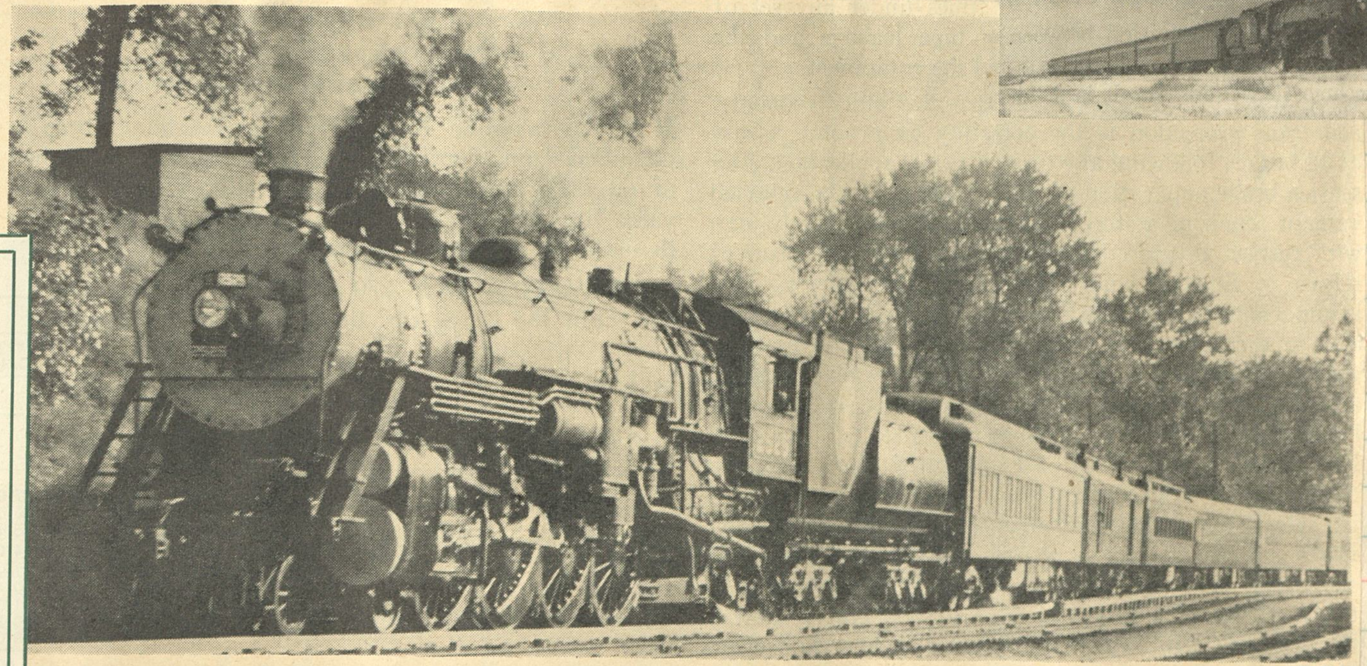
GREAT NORTHERN ENGINE 2511 LEAVING COLUMBIA FALLS, MONT., JUST WEST OF BAD ROCK CANYON.



Rail Photo Service

GREAT NORTHERN ENGINE 2524
This 24-Pullman Troop Train was photographed near Surrey, N.D.

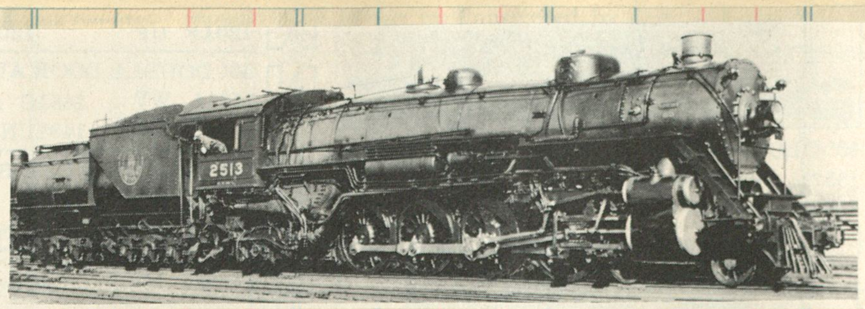
THE CASCADIAN
Air-Conditioned
THROUGH THE CASCADES BY DAYLIGHT
Daily between Seattle and Spokane
A daylight ride along Puget Sound, across the Cascade Mountains and through the famous eight-mile electrified Cascade Tunnel.
Air-conditioned cafe-observation-coach (reserved seats) and modern coaches. Individual chairs at only 50c additional. (Plus 15% U. S. Federal Tax.)

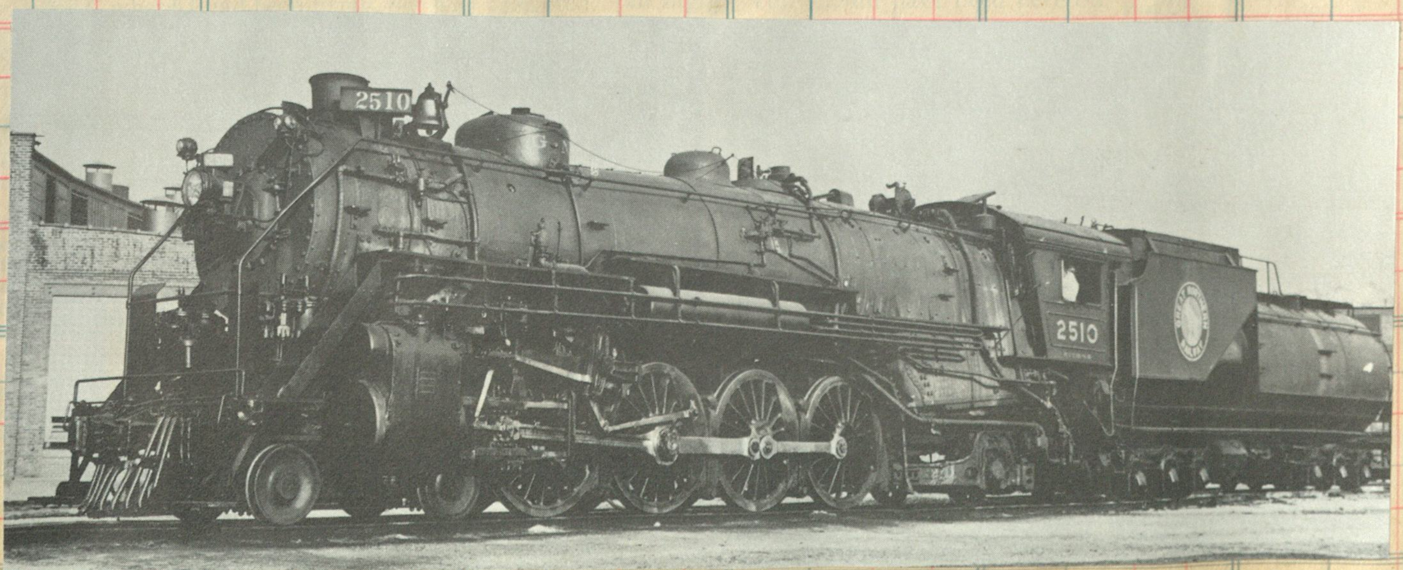


F. Behr

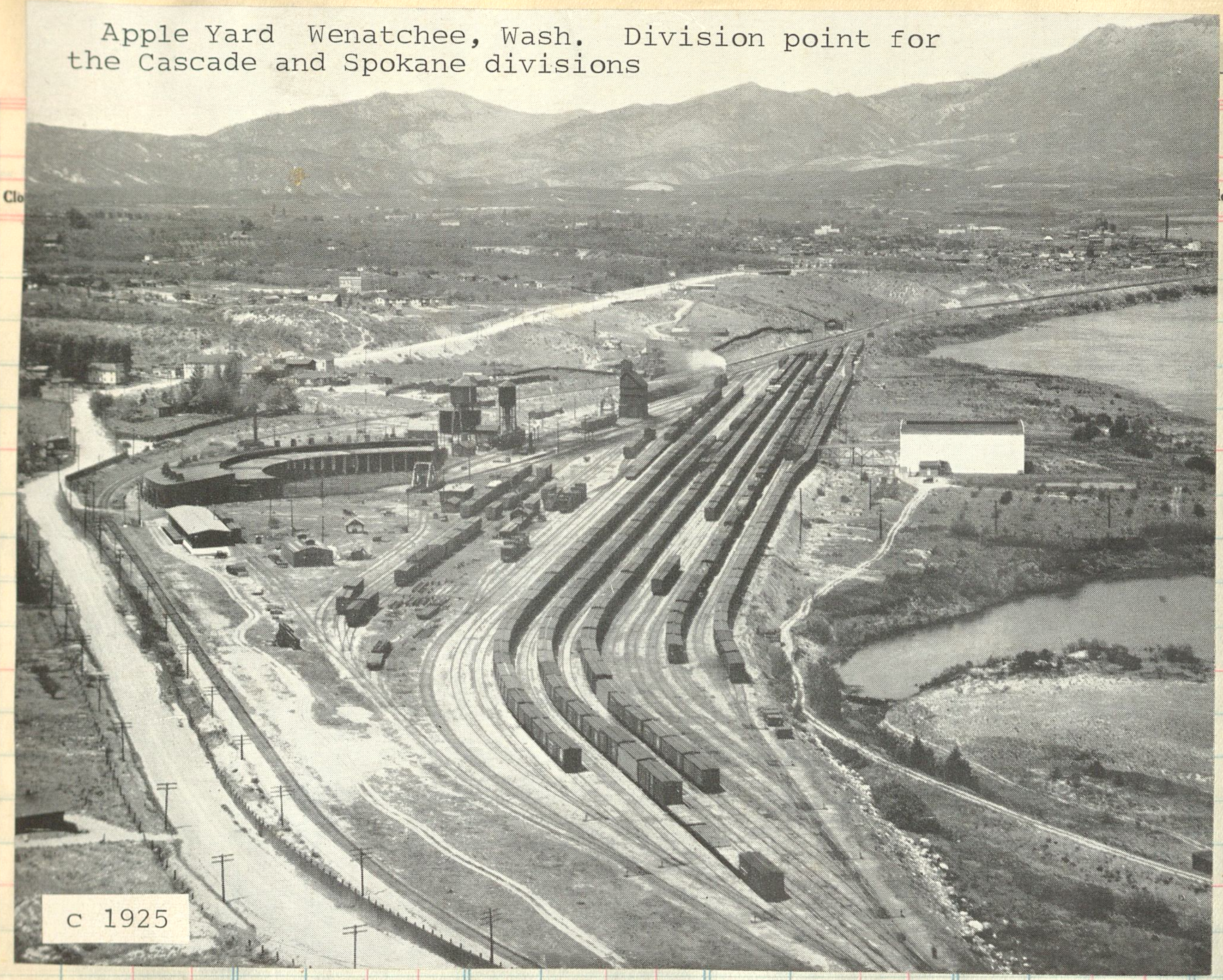
PIRE BUILDER OF GREAT NORTHERN, ENGINE 2525, MAKING A GRADE NEAR GREAT NORTHERN ROUNDHOUSE AT ST. PAUL, MINN.

GREAT NORTHERN RAILWAY

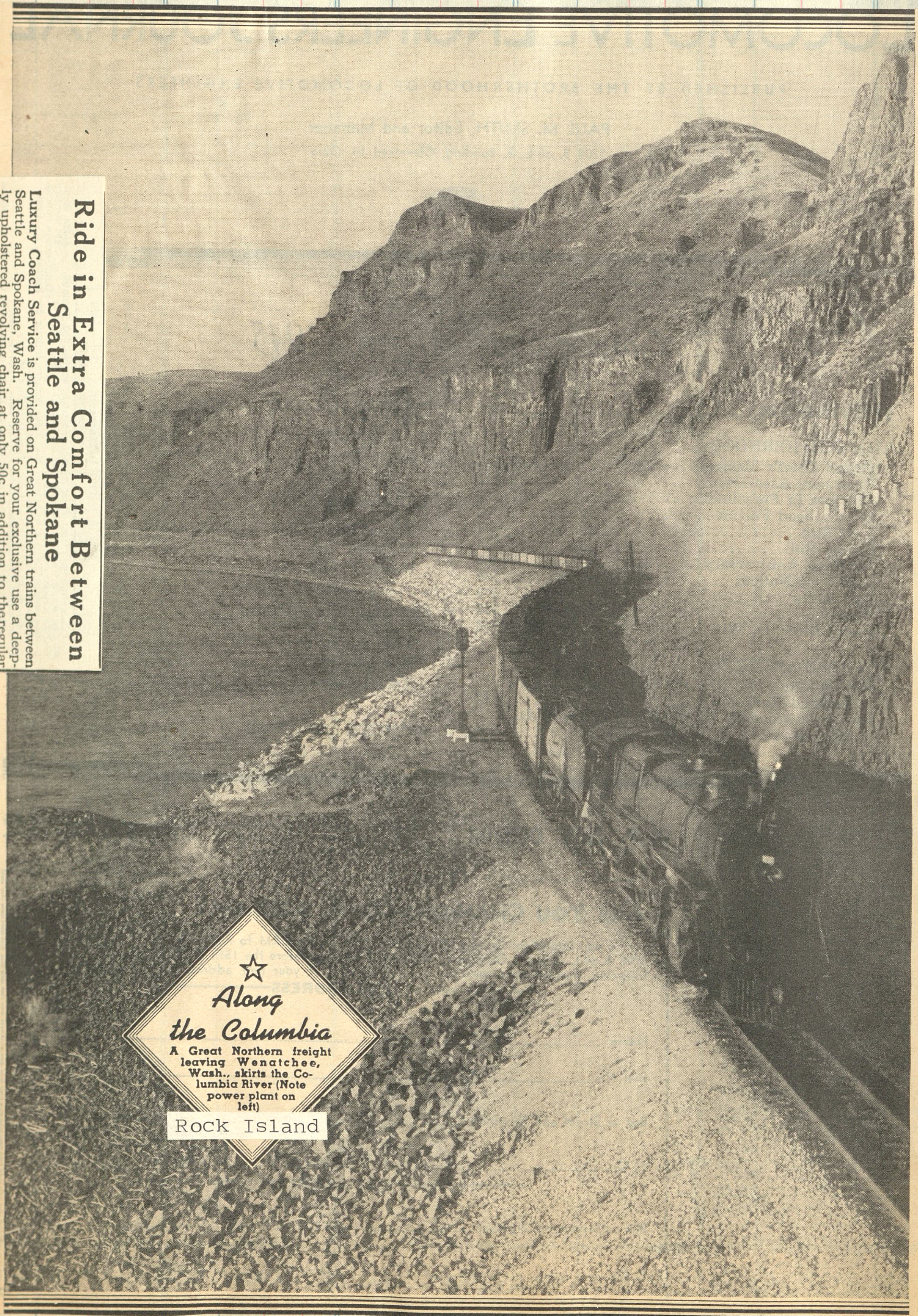




Westbound "CASCADIAN" at West end of the yard at Gold Bar


Apple Yard Wenatchee, Wash. Division point for the Cascade and Spokane divisions

c 1925



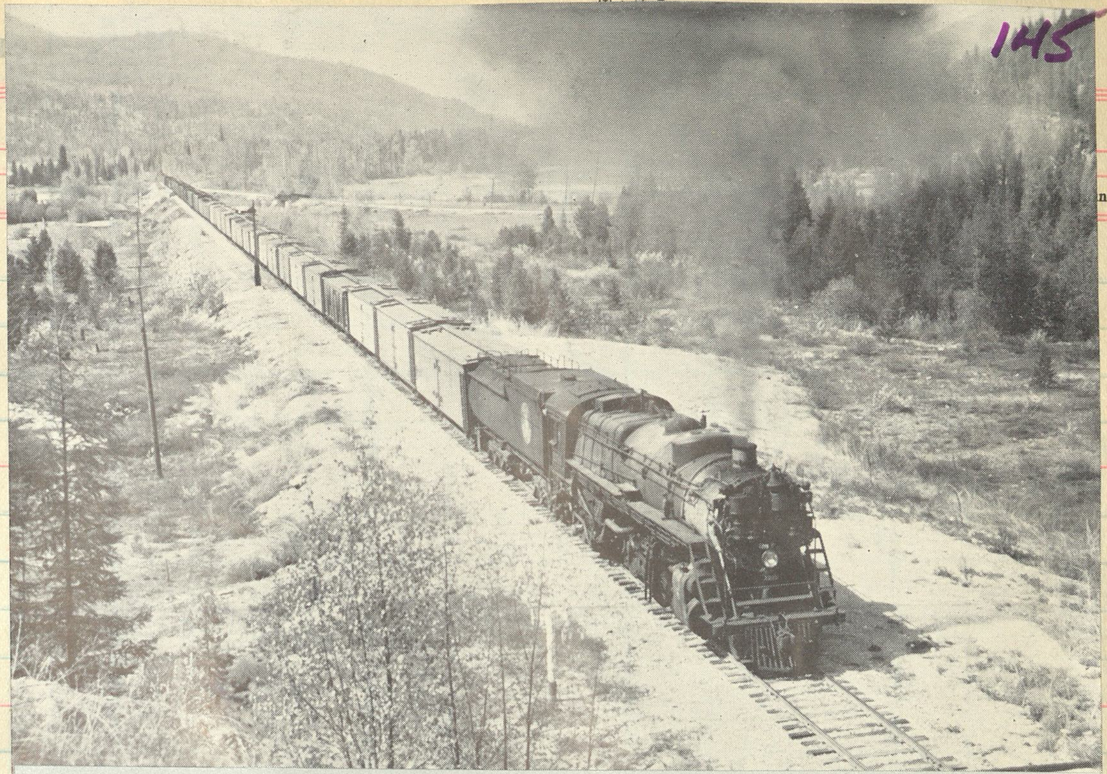
A Great Northern freight leaving Wenatchee, Wash., skirts the Columbia River (Note power plant on left)

Rock Island

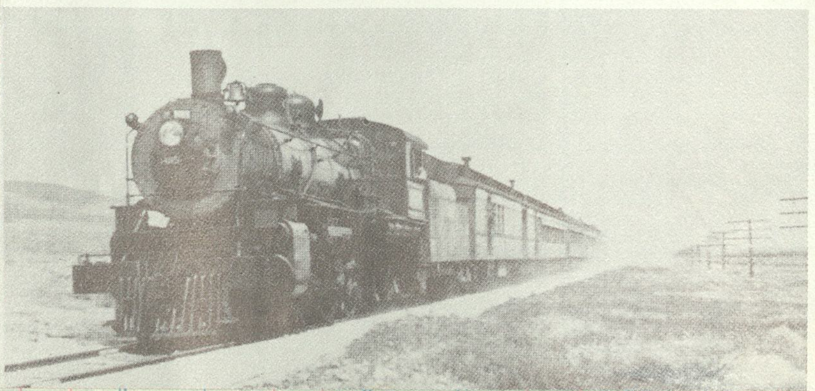
**Ride in Extra Comfort Between Seattle and Spokane**

Luxury Coach Service is provided on Great Northern trains between Seattle and Spokane, Wash. Reserve for your exclusive use a deeply upholstered revolving chair at only 50c in addition to the regular rail fare. Ask your agent to arrange this service when buying your ticket.

**WENATCHEE VALLEY**, famous the world over for its big red apples. Apple growing is a specialized business with the over three thousand growers in the Wenatchee District.

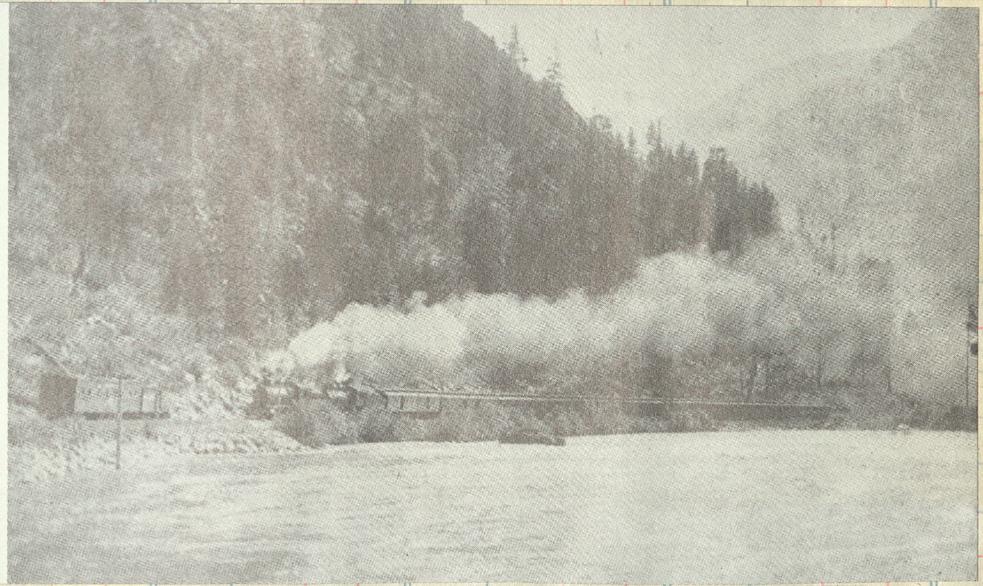

Second #436, full tonnage of Wenatchee apples, being wheeled to eastern markets behind a big O-8 class Mike.

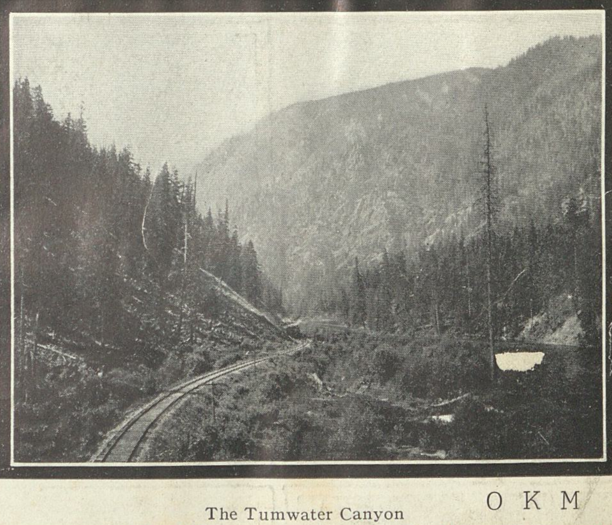
1485


**GN** #5 the westbound Cascadian hurries along the fast track between Wenatchee and Spokane just beyond the small town of Ephrata in May 1941. Much of Central Washington in the days before completion of the Columbia Basin Reclamation project was a thinly populated semi-dessert of brown hills, sagebrush, hot winds, jackrabbits and rattlesnakes. The land has since bloomed with a variety of green crops and the towns have boomed, so that this photo indicative of its character 25 years ago no longer holds true. (W. R. McGee)

This trackage was abandoned when the new Chumstick line was opened in 1928

**THE ORIENTAL LIMITED**, train #1 westbound, pounds along the Wenatchee River west of Leavenworth in the Tumwater Canyon climbing the east side of Stevens Pass, during the early summer of 1909. Doubleheaded because of the 2% grades not far from this spot, the Consolidation on the point serves as helper to the ten wheeler running as the road engine. (Harrison Usher)

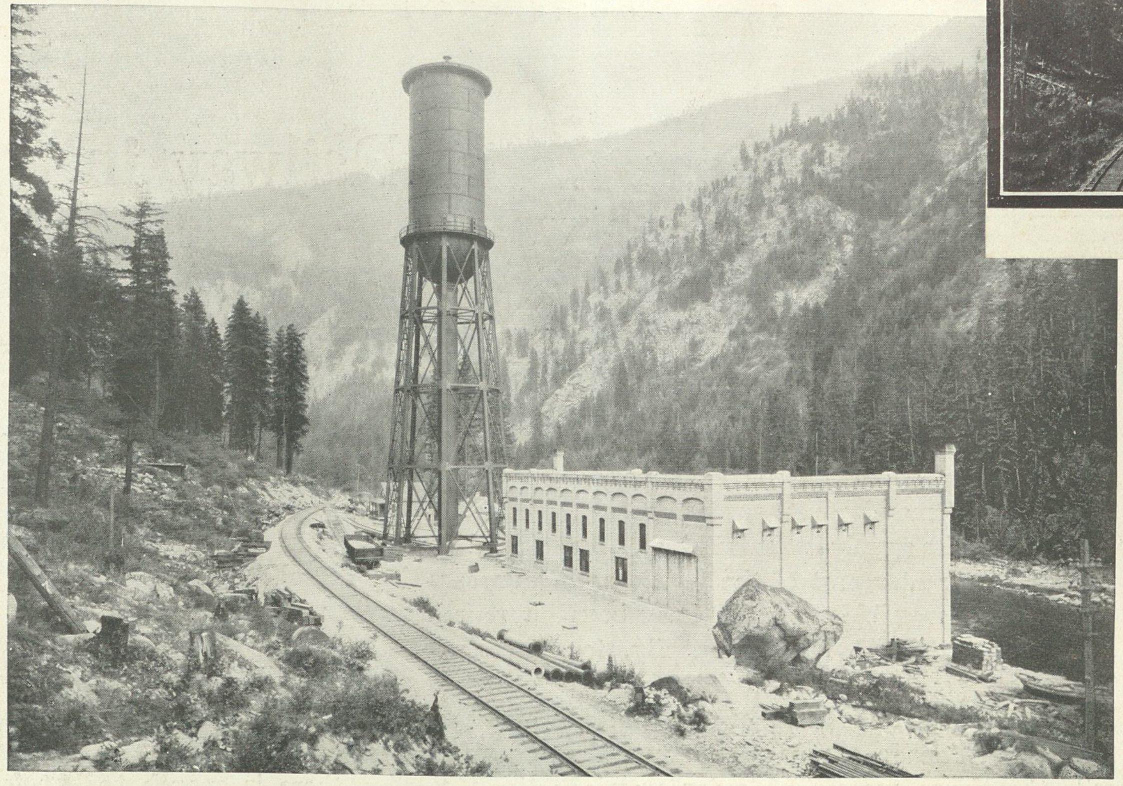



The Tumwater Canyon

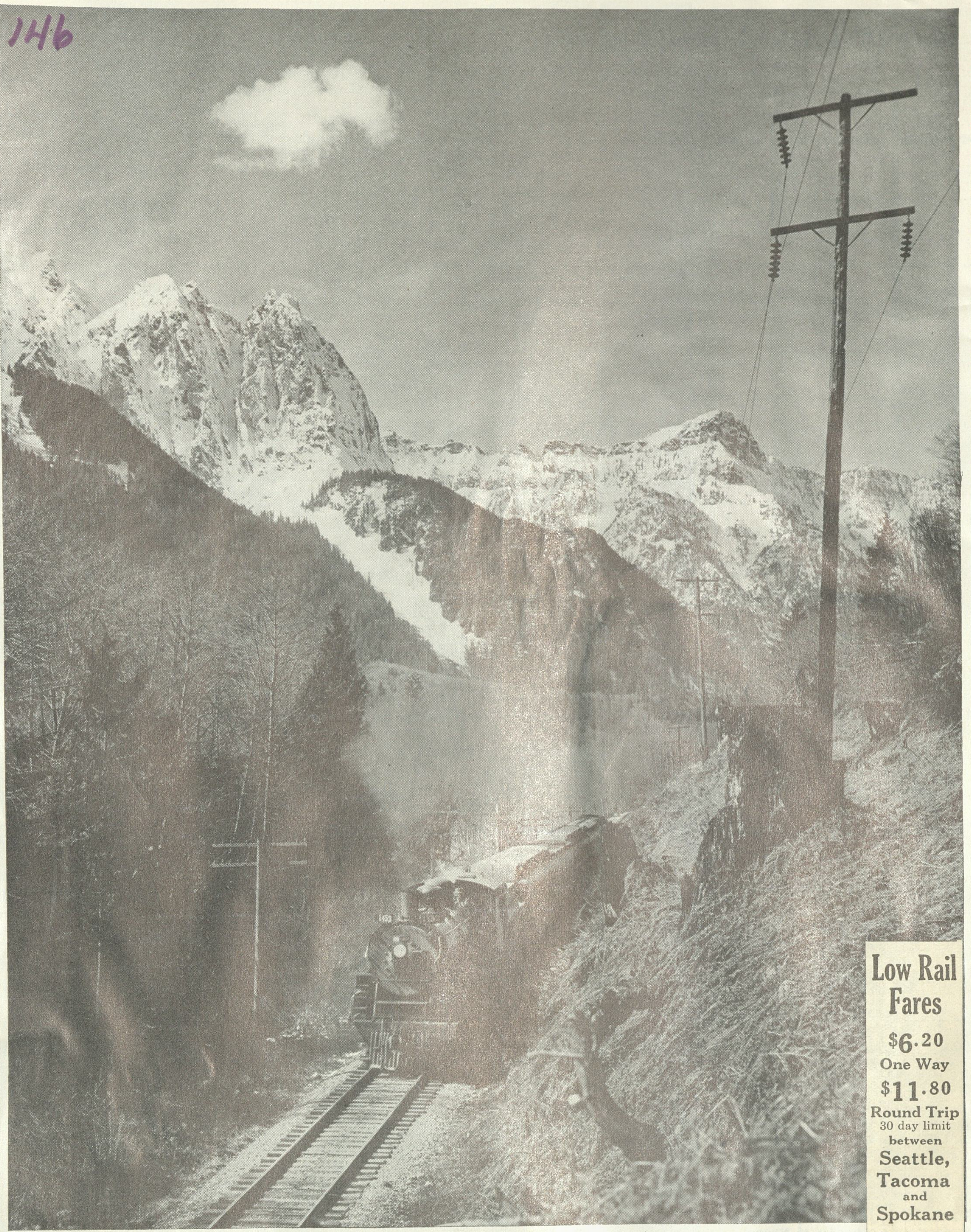
O K M

This right of way now part of highway U.S. 2

Power station blt 1907-09 to produce current for first Cascade Tunnel electrification.


THE POWER-HOUSE IN THE TUMWATER CANYON.
The water is drawn from the Wenatchee River at a point 1½ miles away.

146



**Low Rail Fares**

**$6.20**
**One Way**
**$11.80**
**Round Trip**
30 day limit
**between**
**Seattle, Tacoma and Spokane**

**Fares apply in either direction.**

**TRAIN NO. 6—THE CASCADIAN**
**DAILY—Seattle, Everett, Wenatchee, Spokane.**

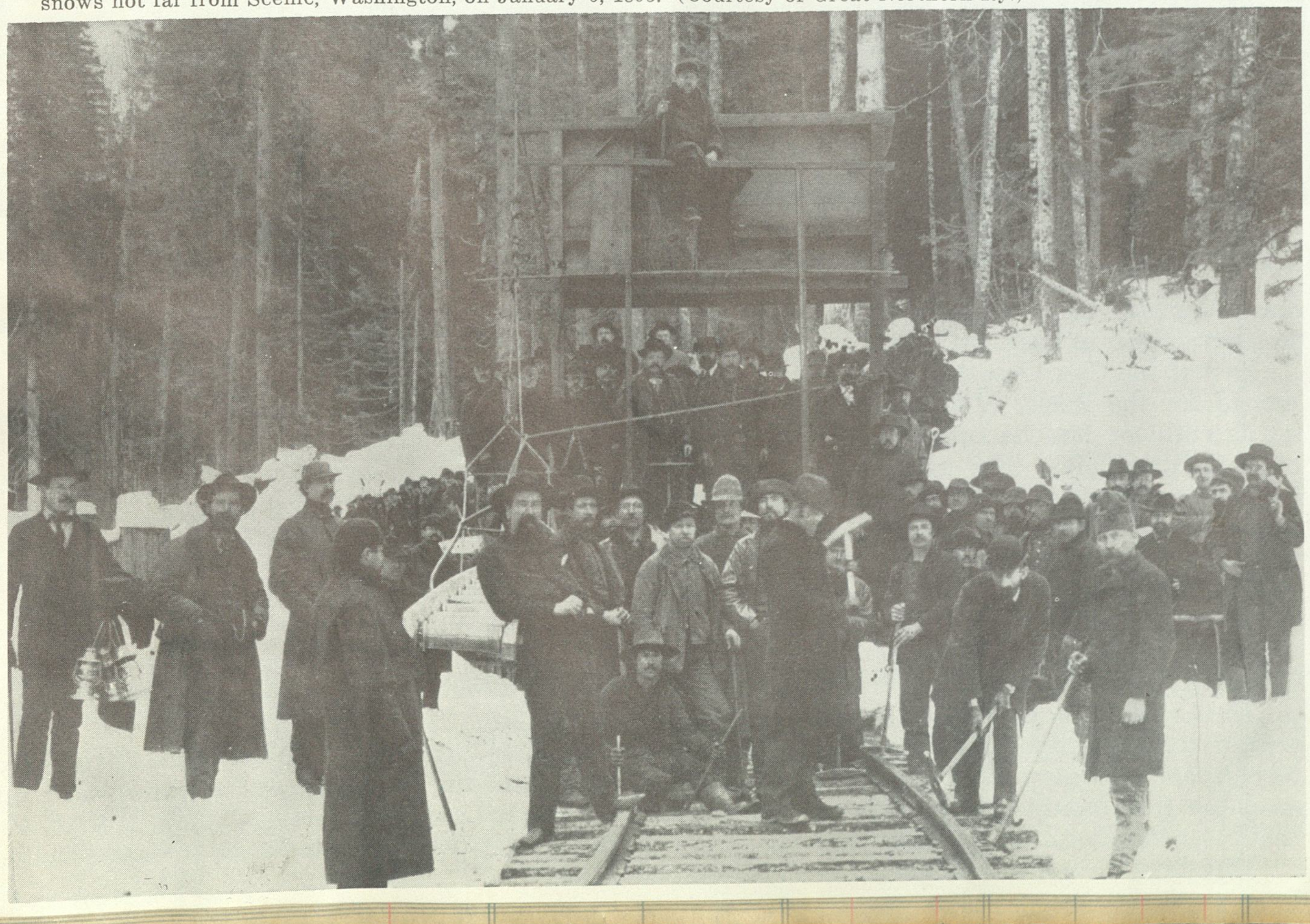
**Tables 5 & 6.**

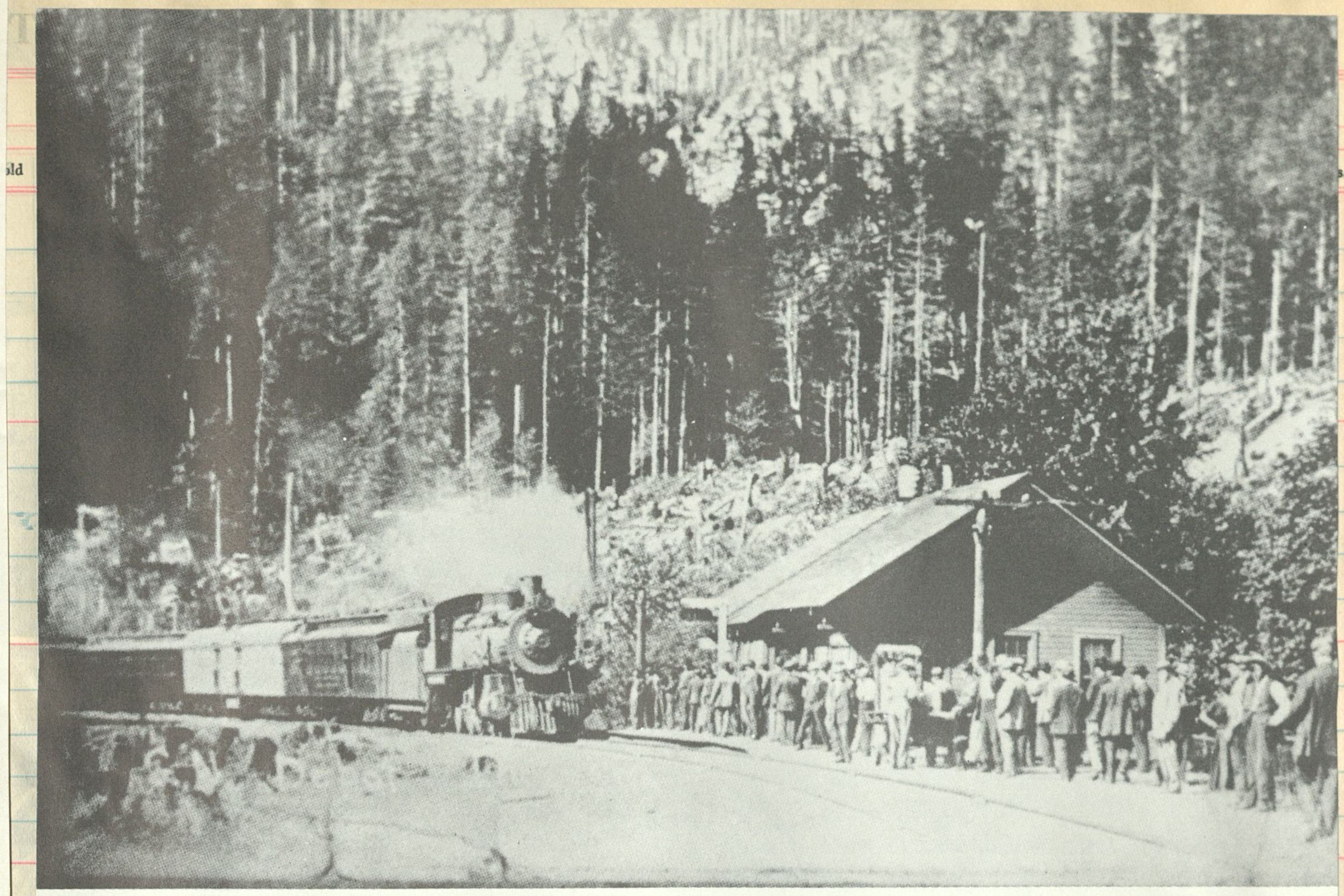
Cafe-Observation-Coach-Reserved Seats—Air-Conditioned.................Seattle and Spokane G. N. Car (150).
Coach—Air-Conditioned.....Seattle and Spokane.

Great Northern's train No. 6, the eastbound Cascadian, climbs the grade toward the 7.8-mile Cascade Tunnel at the summit of Stevens Pass, Washington. Mount Index, 5639 feet high, is in background. The Cascadian runs between Seattle and Spokane.

The most interesting and spectacular one day train trip in the U.S.! The scenery along the route was both varied and wonderful--high, arid rangeland, endless irrigated wheat fields, canyon country along the Columbia, fruit orchards of Wenatchee, the magnificent Cascades and the Cascade Tunnel, lumber and farming country then along tide water of Puget Sound!!!

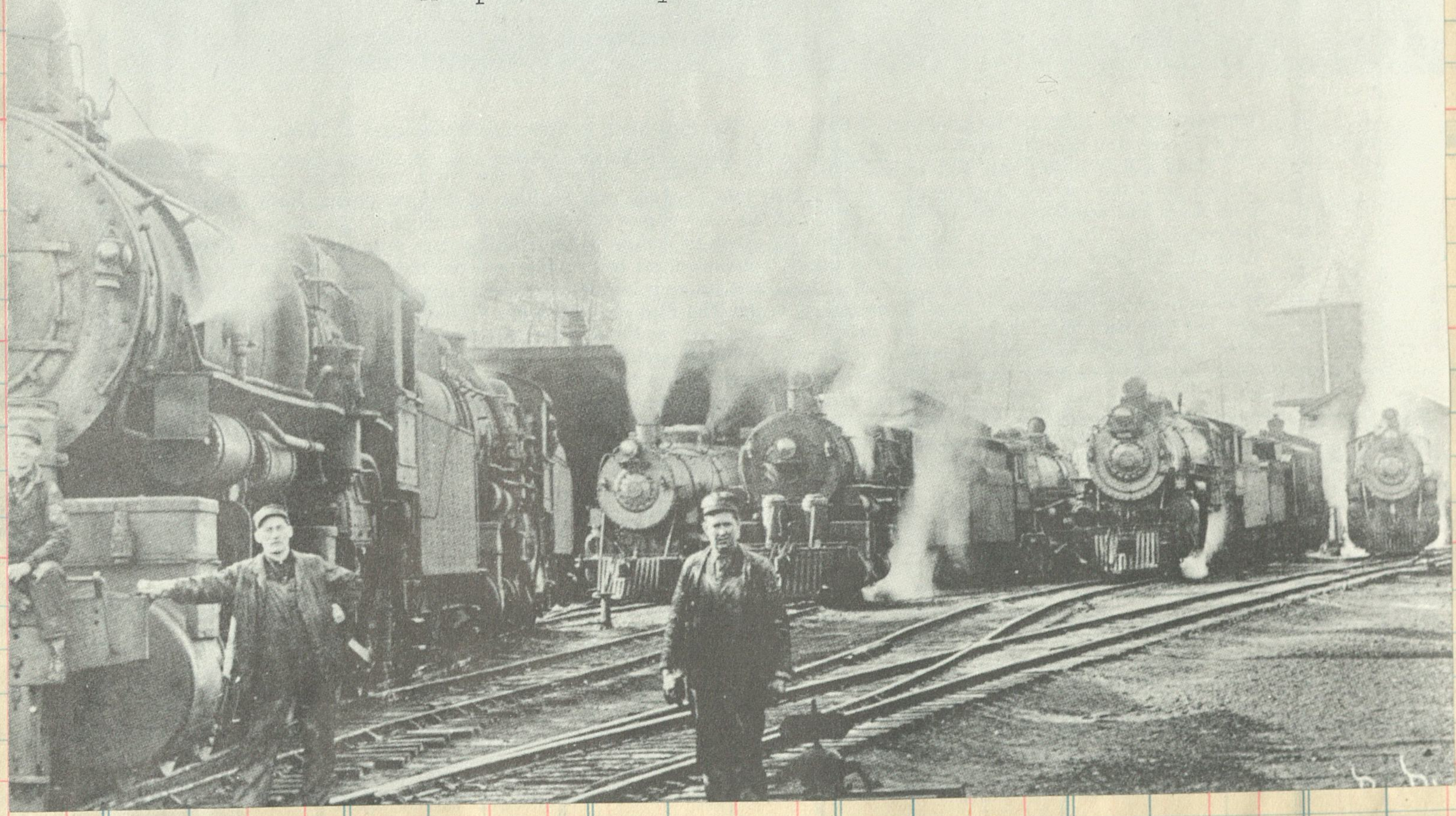
**LAST SPIKE** in the construction of Great Northern Railway's transcontinental line is hammered home amid winter snows not far from Scenic, Washington, on January 6, 1893. (Courtesy of Great Northern Ry.)



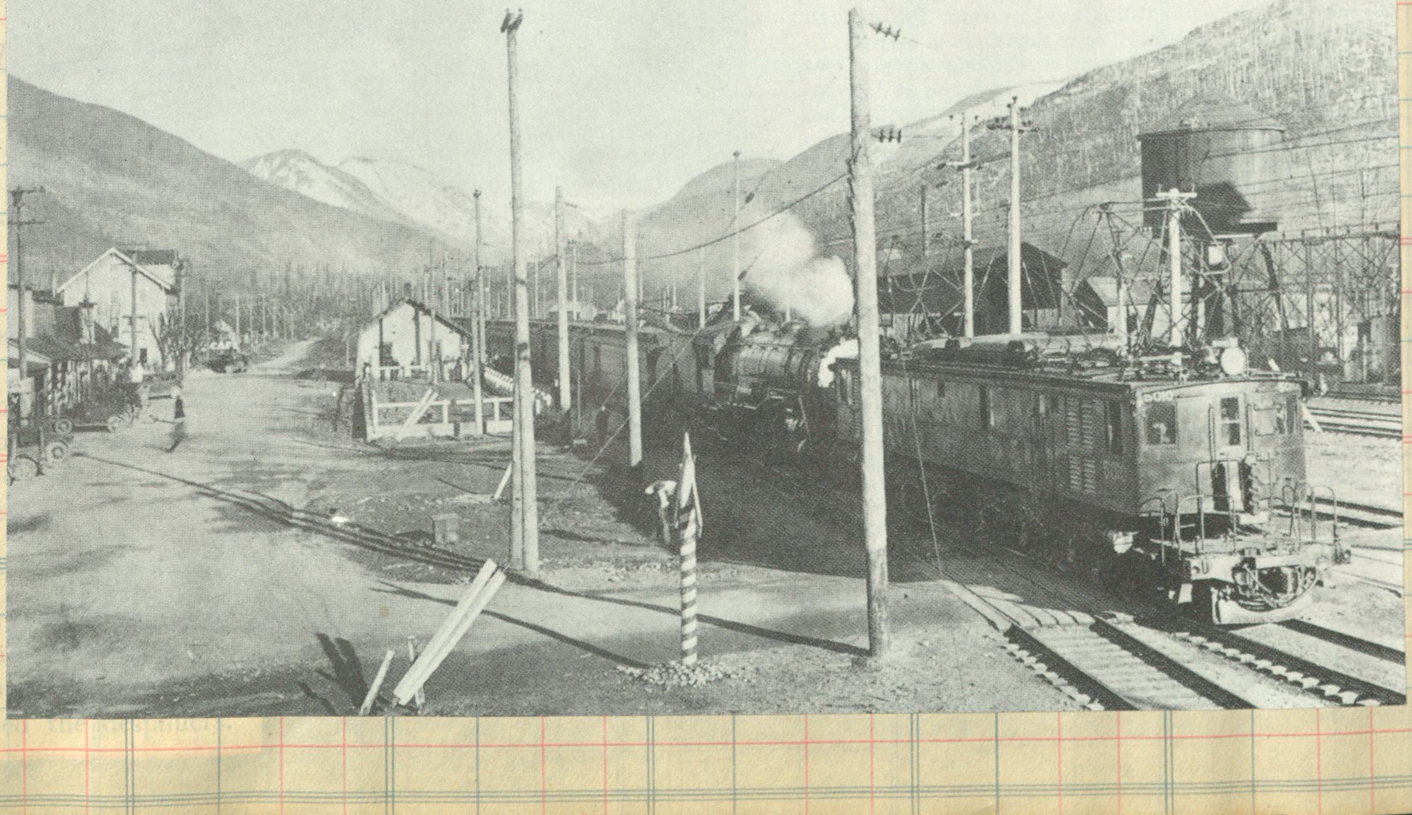


**THIS WORLD WAR I PERIOD PHOTO** of an eastbound passenger train pulling into Index, Washington has been the subject of much speculation. The style of the faint lettering on the photo would indicate that it is an early Pickett photo—Mr. Pickett lived in Index and had a small studio there. Very little can be determined concerning the event taking place, but the size of the crowd at the station is completely out of keeping with the size of the town. Possibly trouble on the line has forced these passengers to wait for the next train or maybe they are GN employees returning to Tye and other stations after a holiday. In any event, on this day, Index looks like a commuter station, and probably has not seen so many people at the station before or since. (Claude Witt)

Helpers at Skykomish--1912

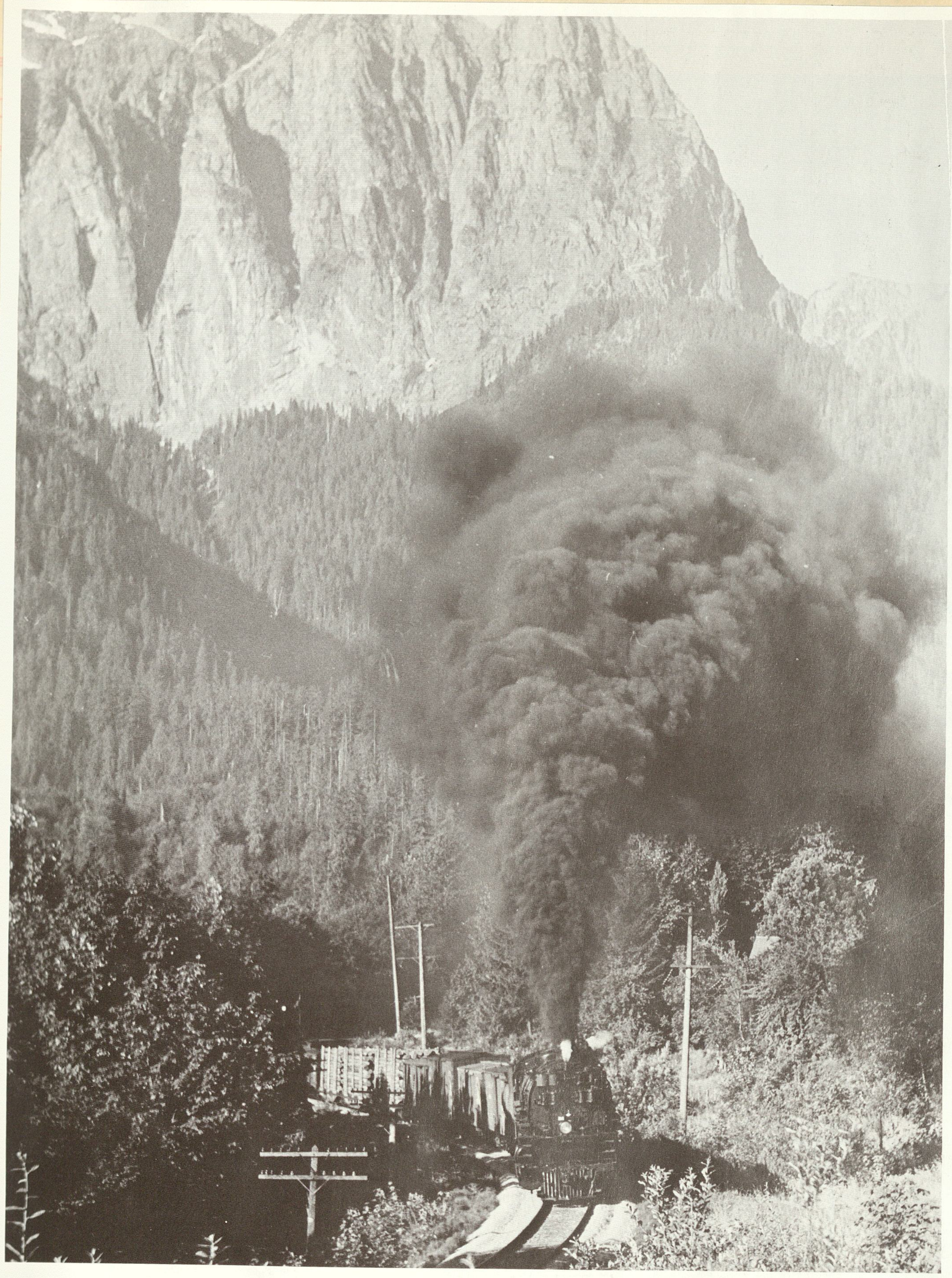


"Sky" 1928



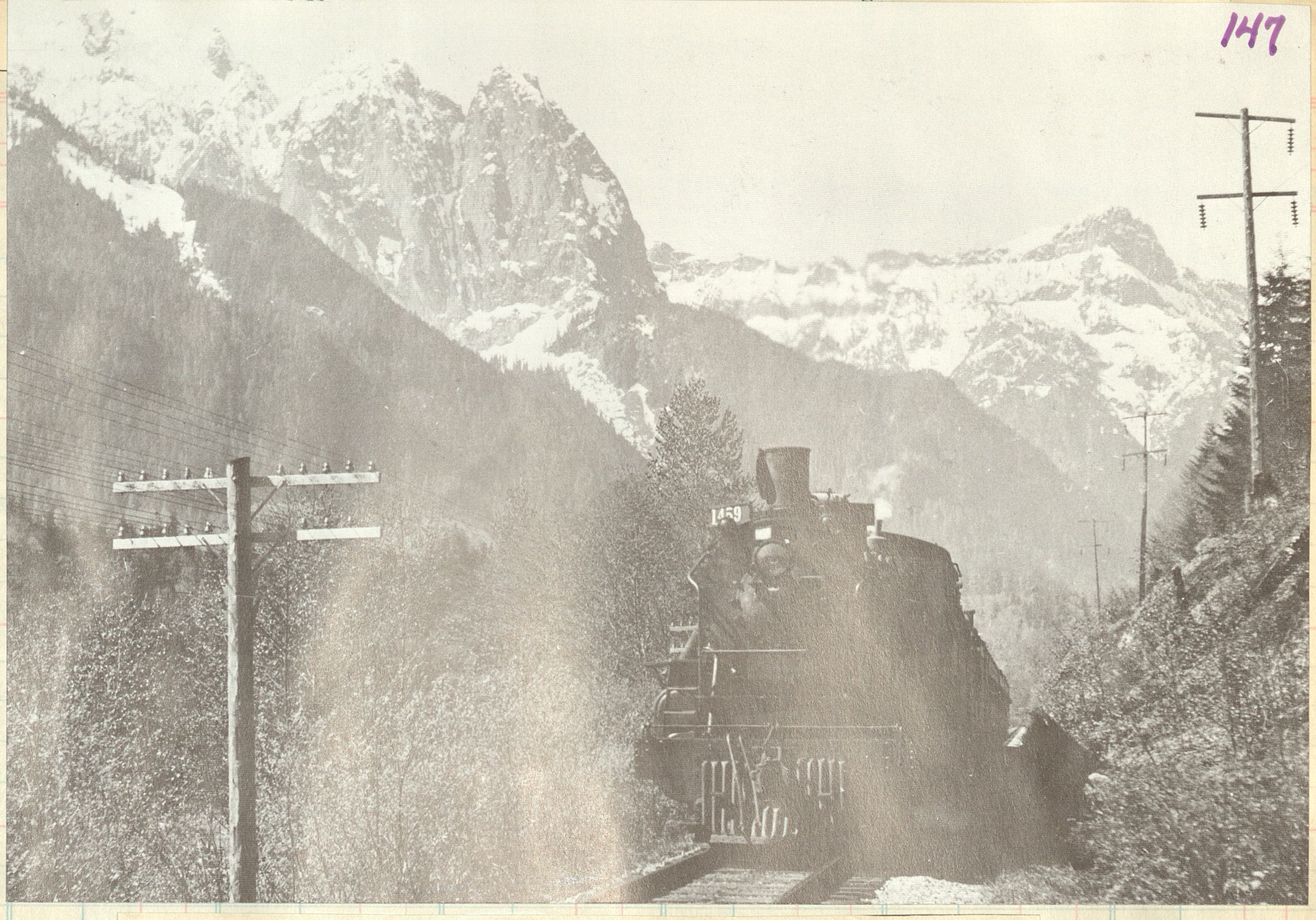
Clas. No.

mount

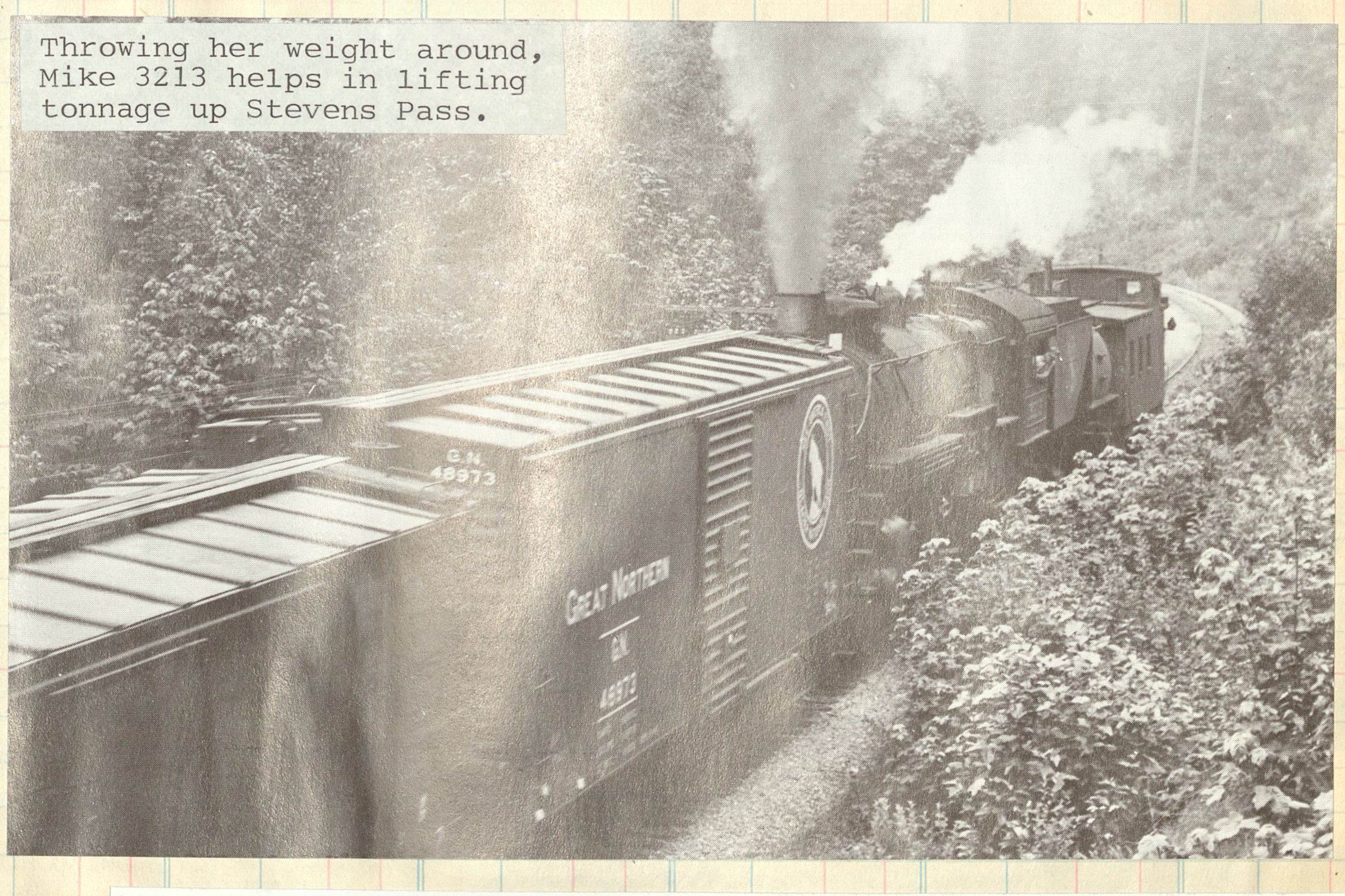


James A. Turner

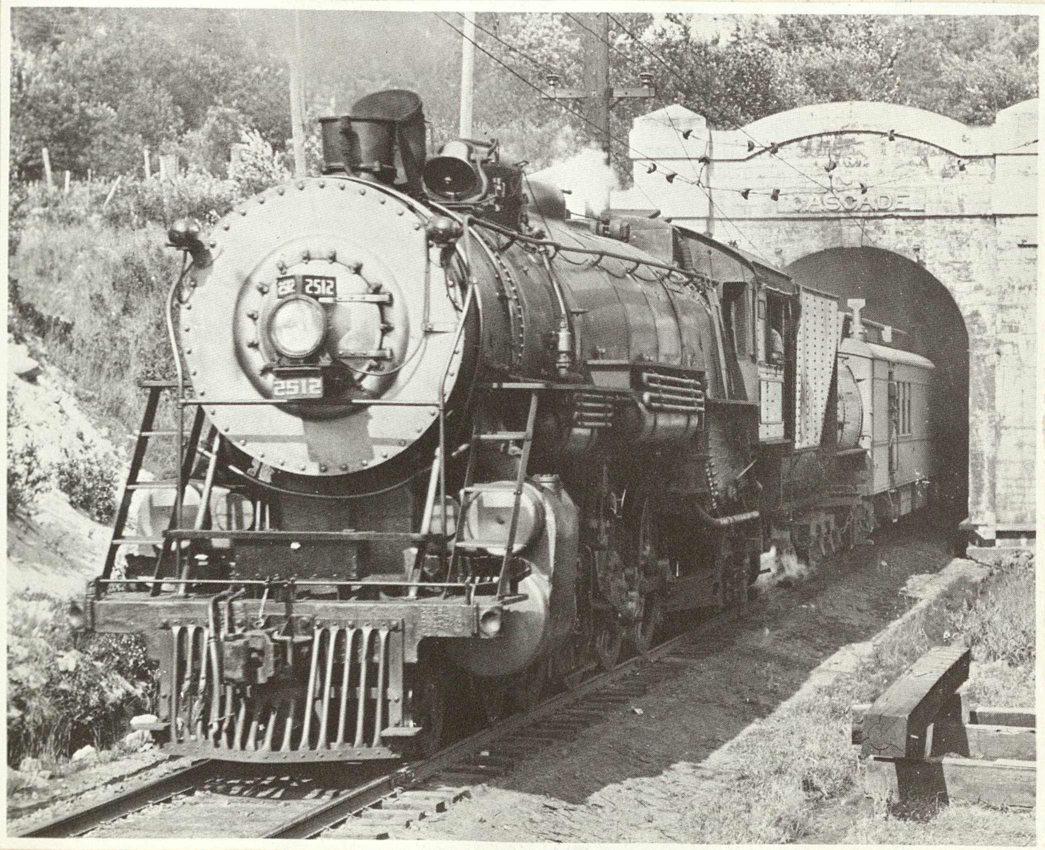
No longer can the majestic peaks of the Cascades look down on the scene of boiling, rolling clouds of smoke or listen to the thundering exhaust as a big mallet assults the Stevens Pass grade.



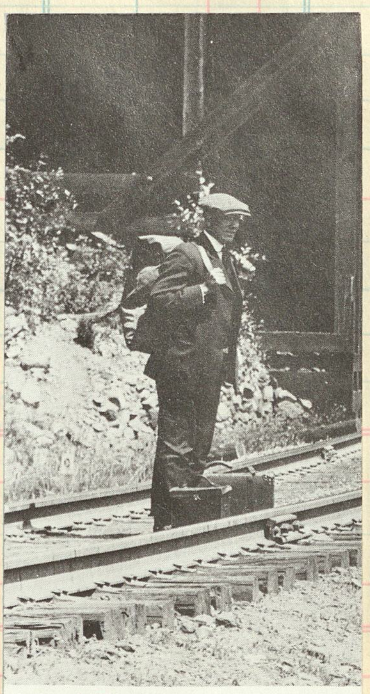
Framed by the stately mountains of its namesake, the CASCADIAN glides along behind Pacific 1459



Throwing her weight around, Mike 3213 helps in lifting tonnage up Stevens Pass.

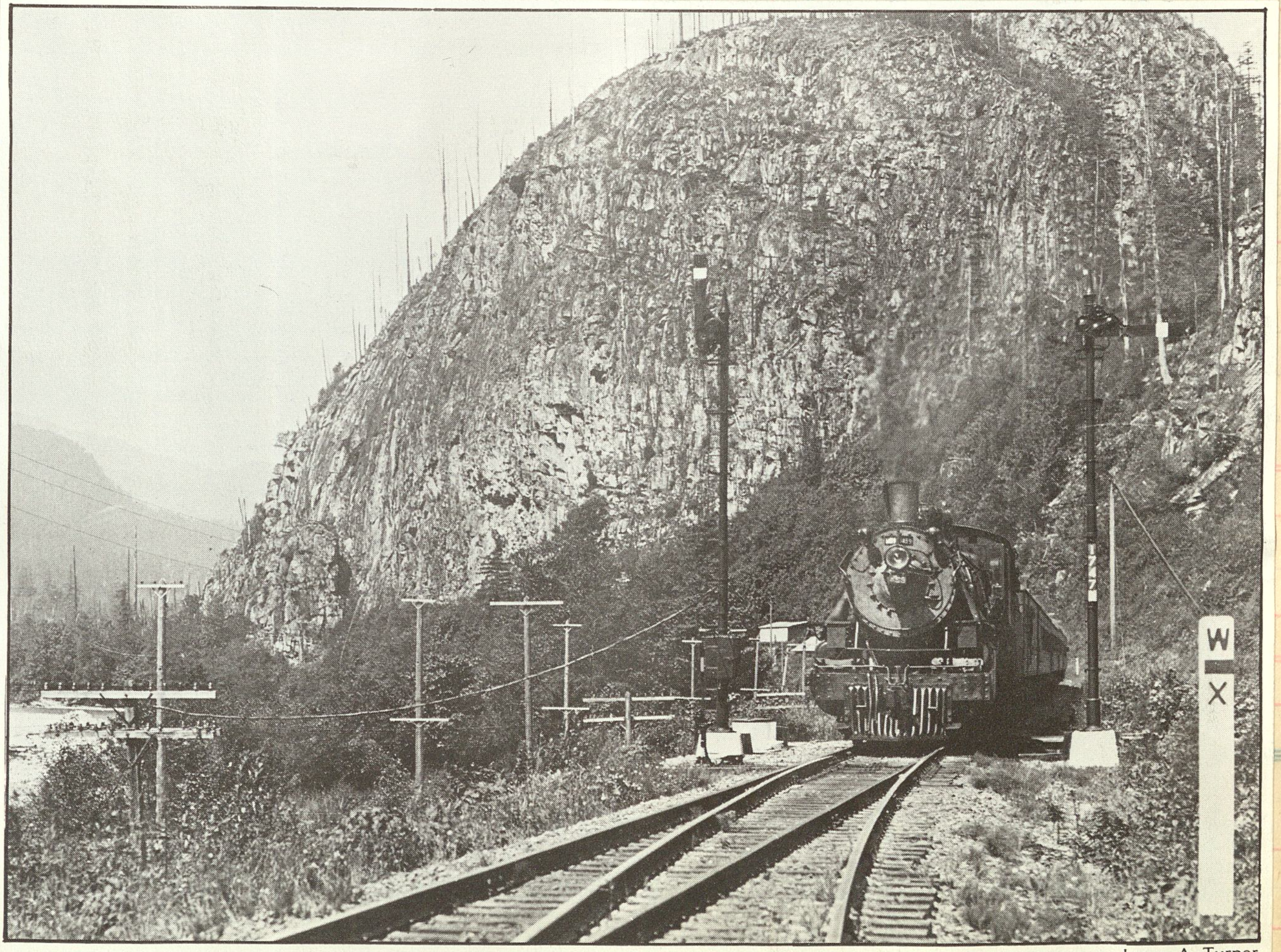


The westbound Oriental Limited breaks into daylight after drifting thru the old orginal Cascade Tunnel



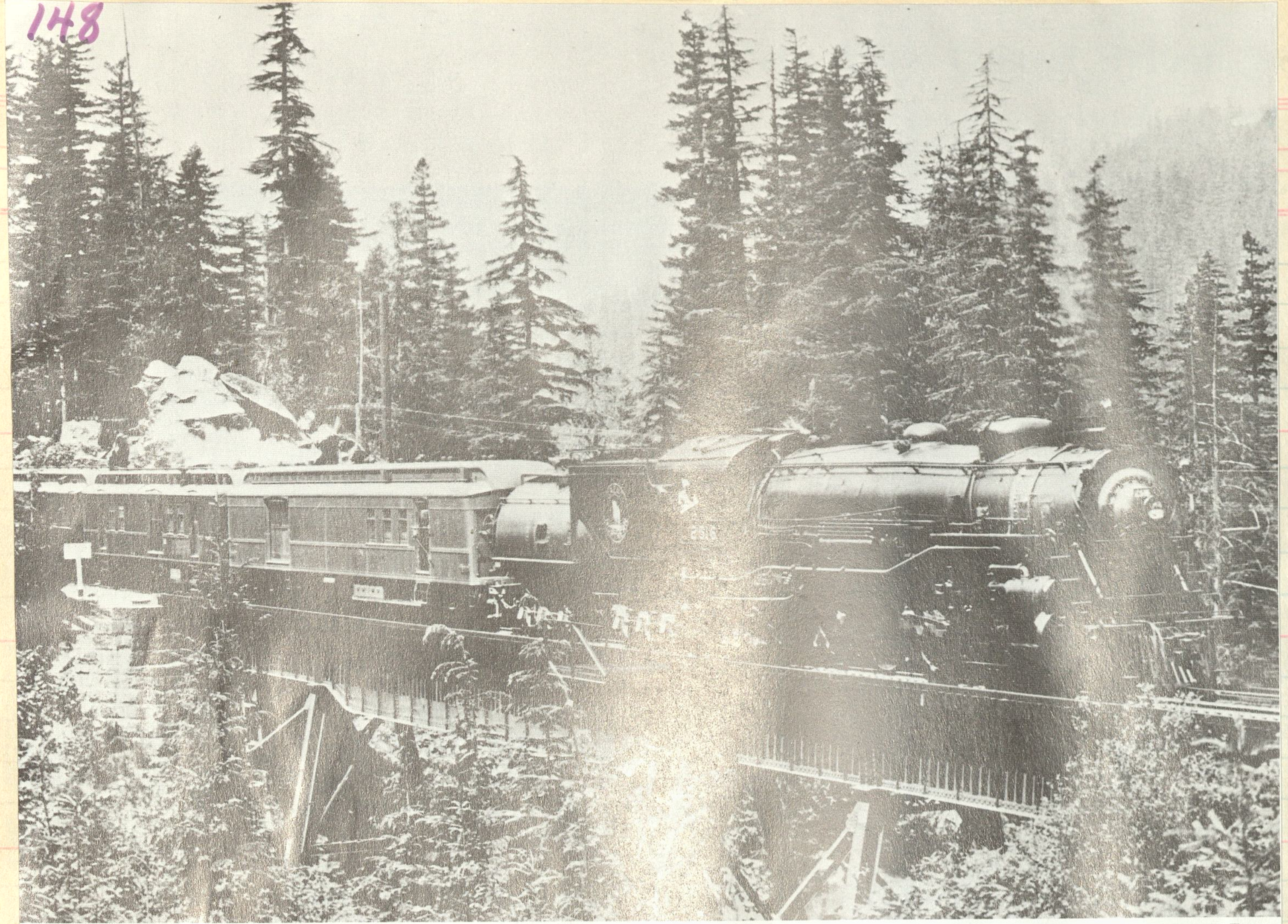
James A. Turner

Jim Turner on location and a few examples of his excellent photography



GN #1459 near Index, Washington with the "Cascadian" in tow.

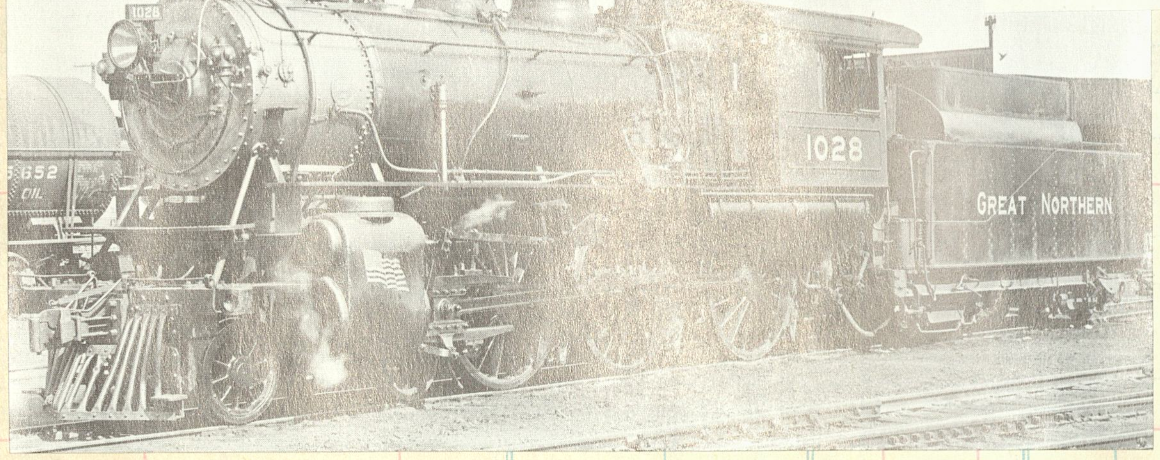
James A. Turner

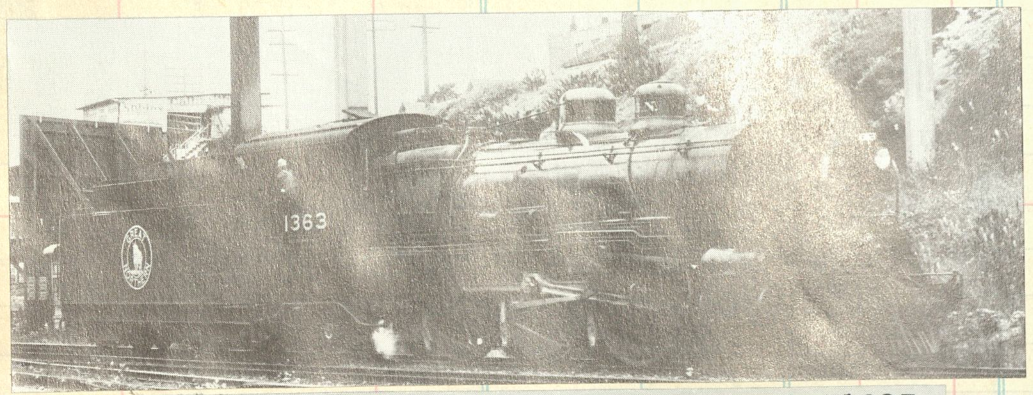


GN P-2 class 4-8-2 crossing Deception Creek in the 1930's.

James A. Turner

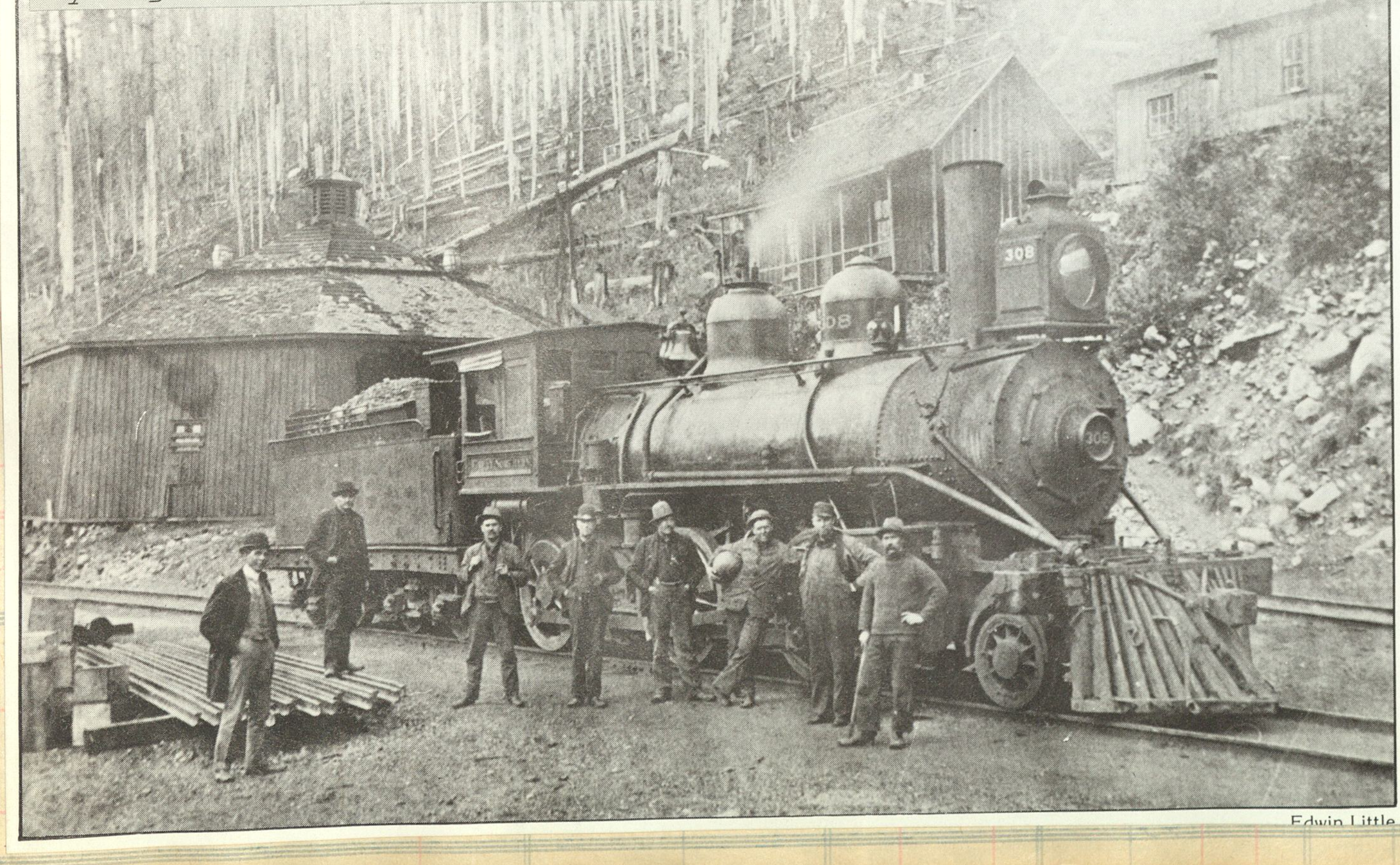
1028 Baldwin 1909
c/n 33941 Reblt to
4-6-2 #1367 at Dale
St in 1926



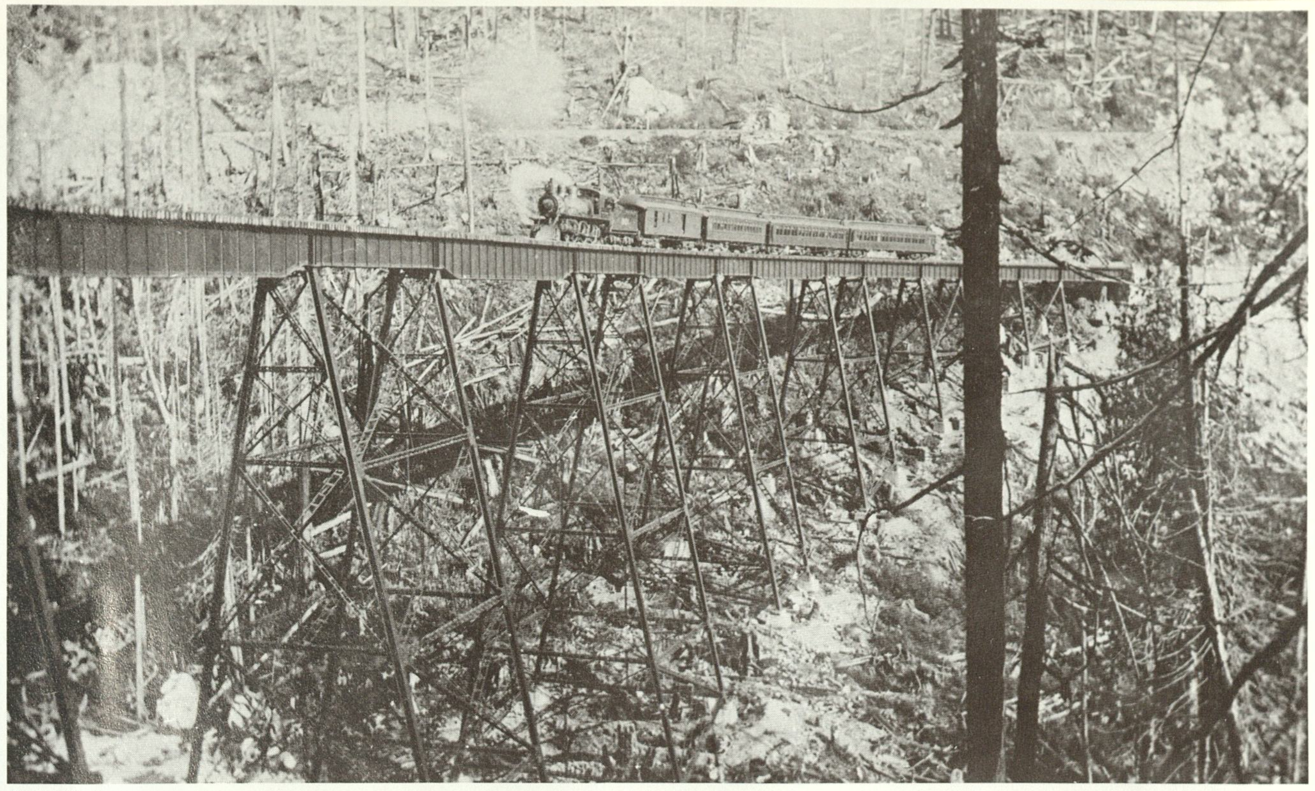


Built by Baldwin in 1909 as 4-6-0 #1027
c/n 33940. Reblt at Hillyard in 1926
and noed 1363

Mountain men and an iron pony at, supposedly, Wellington.
Note the enclosed turntable. The 308 was a 2-6-0 built
by Rogers in 1887 [c/n 3785] for the StPM&M.

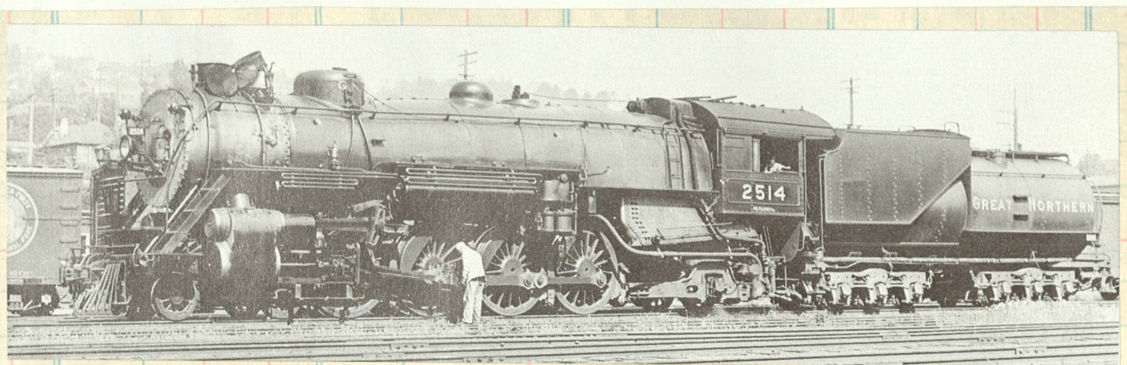


Edwin Little

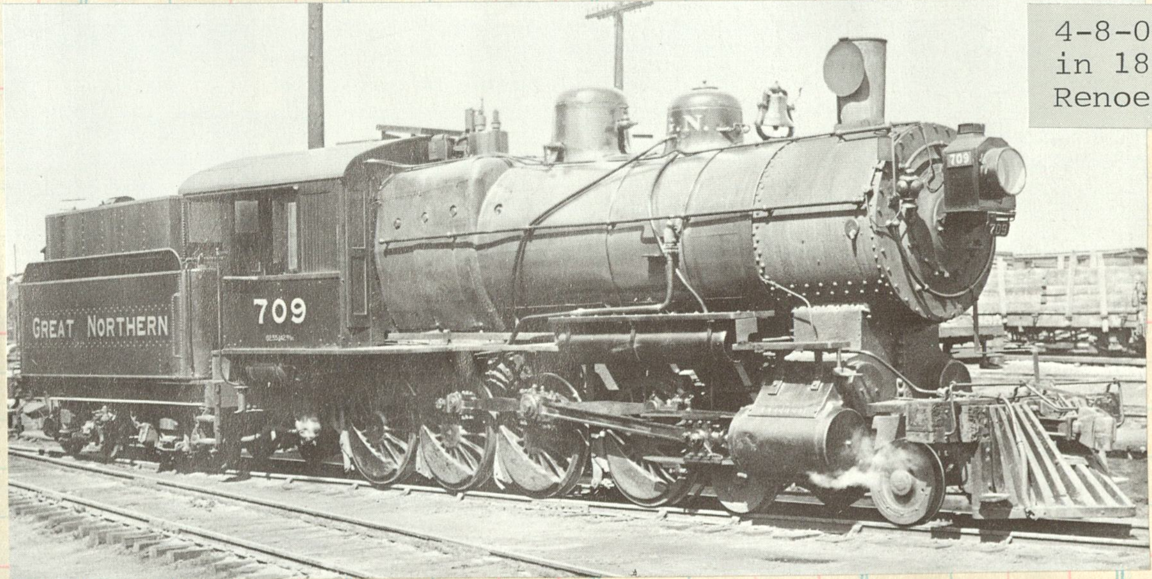


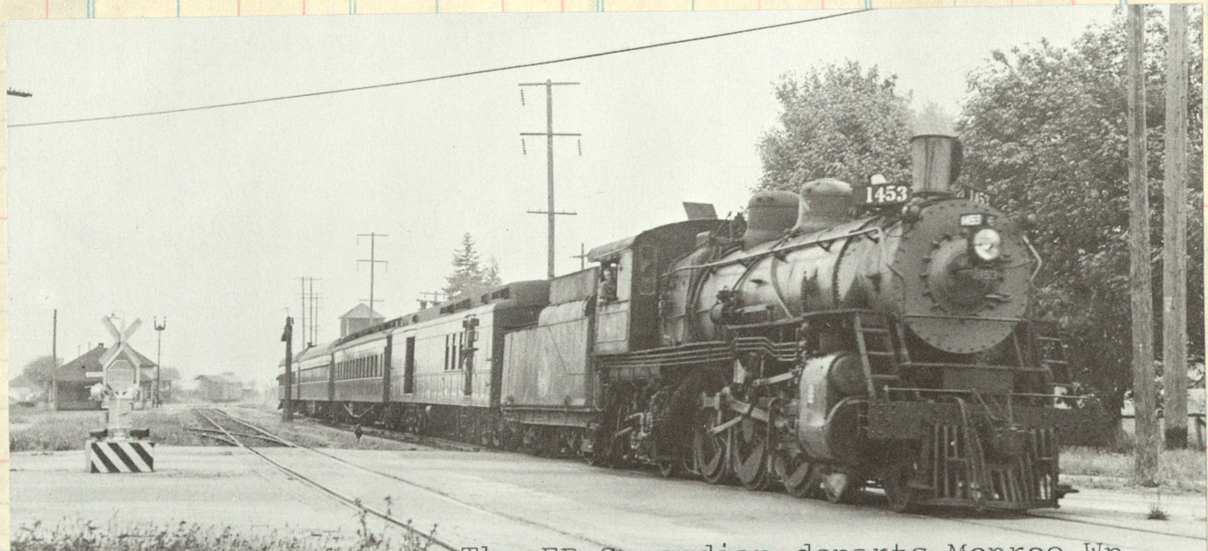
Edwin Little

A GN passenger train on the lower Martin Creek bridge approaching the famous Horseshoe tunnel. It was here the track made a complete semicircle to gain elevation; the upper level is directly above the train. This was one of the toughest stretches of track on the entire GN system and one of the reasons why the line was relocated and a new tunnel built at a lower elevation in 1929.



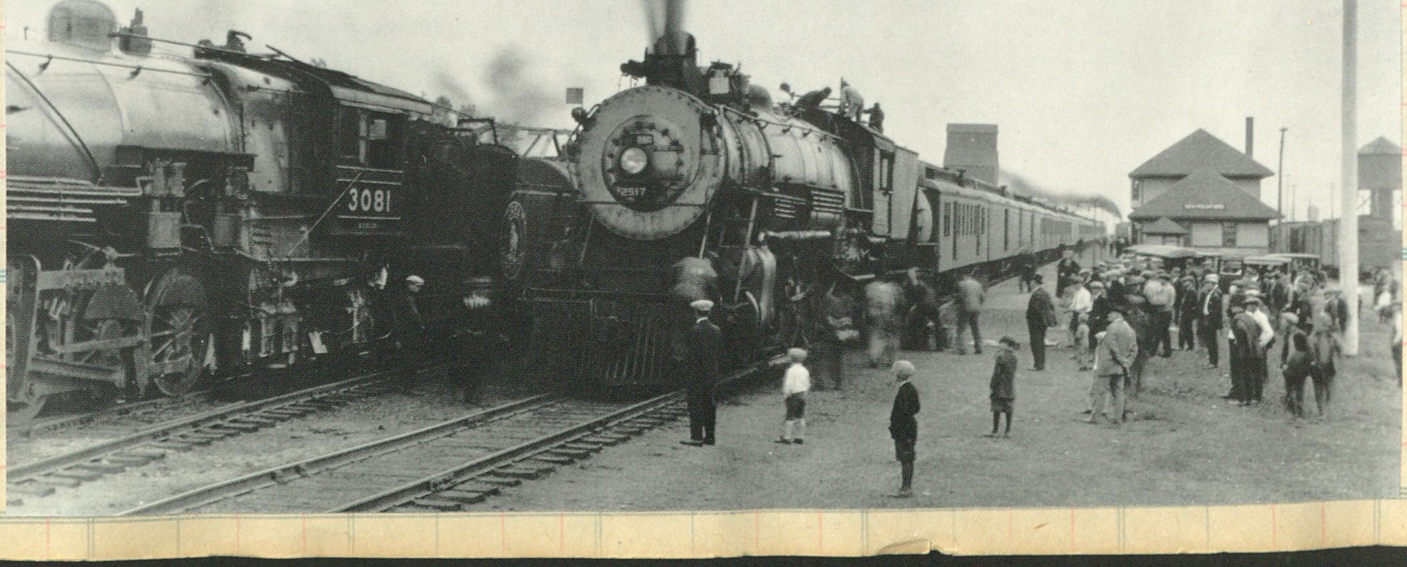
4-8-0 #709 blt as E.M. #309
in 1898 by Brooks (c/n 2988)
Renoed EM 709, to GN 709



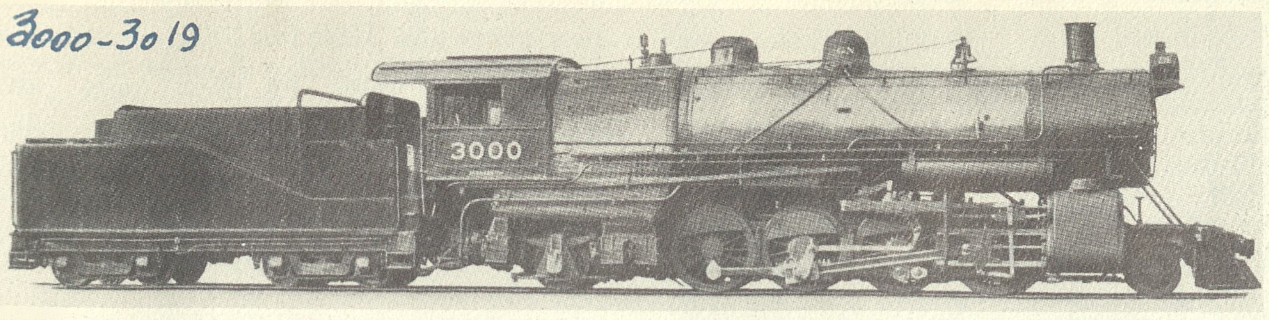


The EB Cascadian departs Monroe Wn

The 2517 on its marathon run
being serviced at Rockford,
N. D. Sept 1925



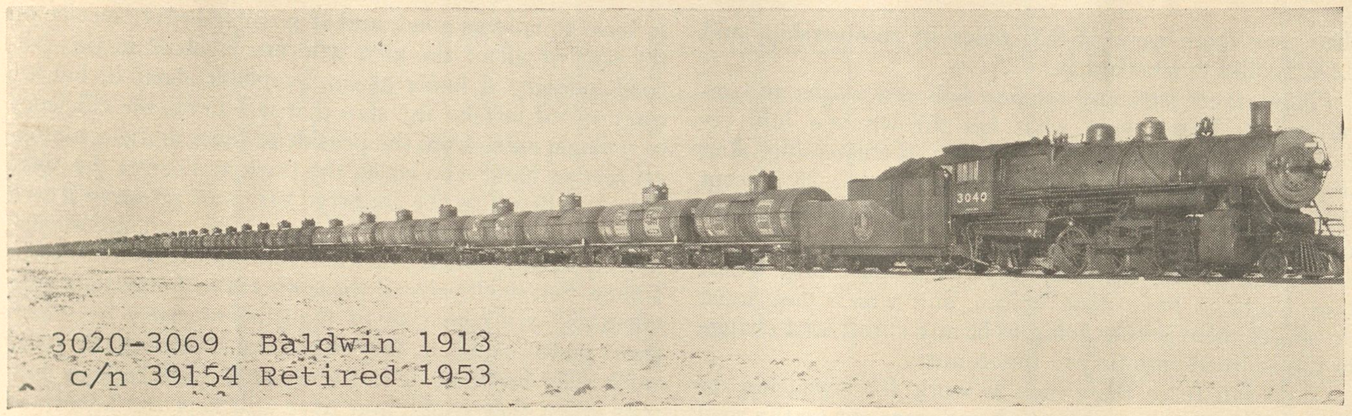
3000-3019



c/n 36832

**Mikado Type Locomotive, Class O-1, Built by The Baldwin Locomotive Works, 1911**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 28″ x 32″ | Tubes, number | 5½″, 30; 2″, 326 | Wheel base, driving | 16′ 9″ | Weight, total engine | 280,000 lb. |
| Drivers, diam. | 63″ | " length | 21′ 0″ | " " total engine | 35′ 0″ | " " " and tender | 434,000 lb. |
| Boiler, diam. | 82″ | Grate area | 78 sq. ft. | " " " " and tender | 68′ 1″ | Tank capacity | 8000 U. S. gal. |
| Steam pressure | 180 lb. | Water heating surface | 4713 sq. ft. | Weight on drivers | 220,000 lb. | Fuel " | 13 tons |
| Firebox | 117″ x 96″ | Superheating surface | 901 sq. ft. | | | Tractive force | 60,930 lb. |
| Tubes, diam. | 5½″ & 2″ | | | | | | |

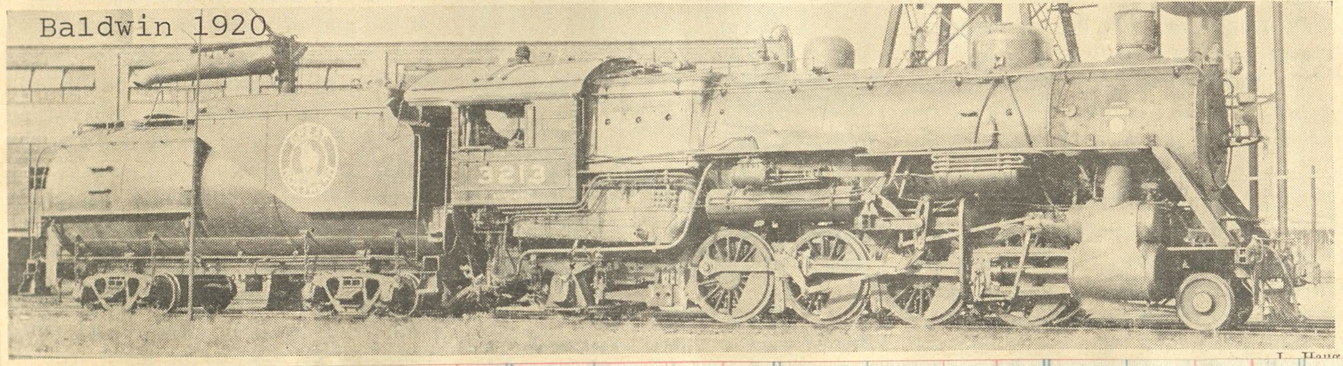


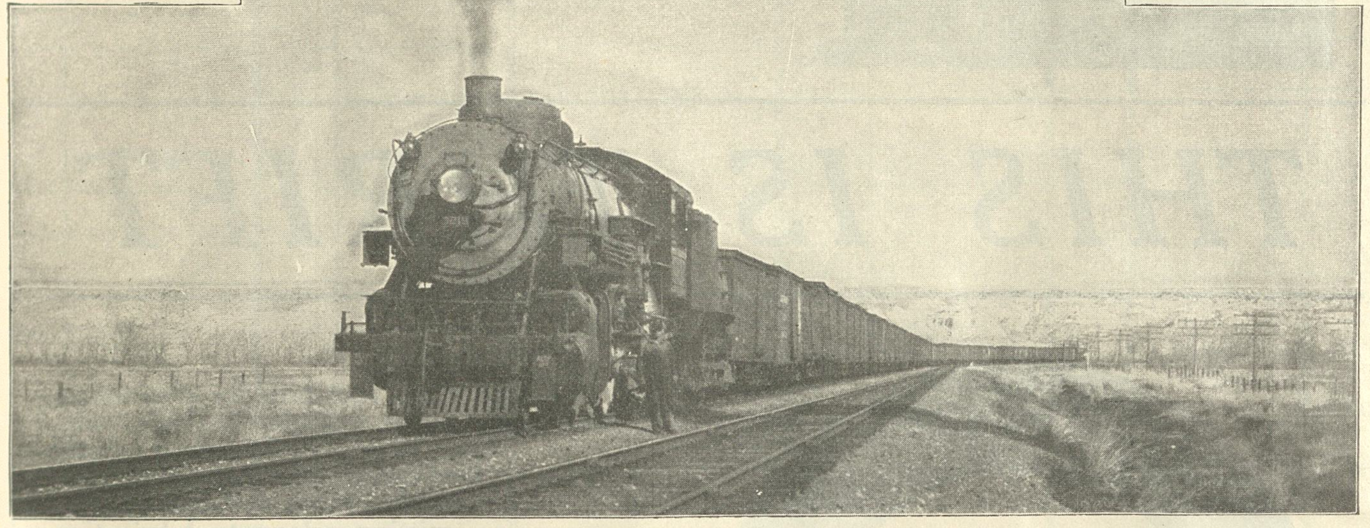
3020-3069 Baldwin 1913
c/n 39154 Retired 1953

GREAT NORTHERN TANK TRAIN

Oil Train en route to Winnipeg, drawn by locomotive 3040 of the Great Northern. If it were not for the thousands of miles of pipe lines, there would be many more trains like this one.

Baldwin 1920





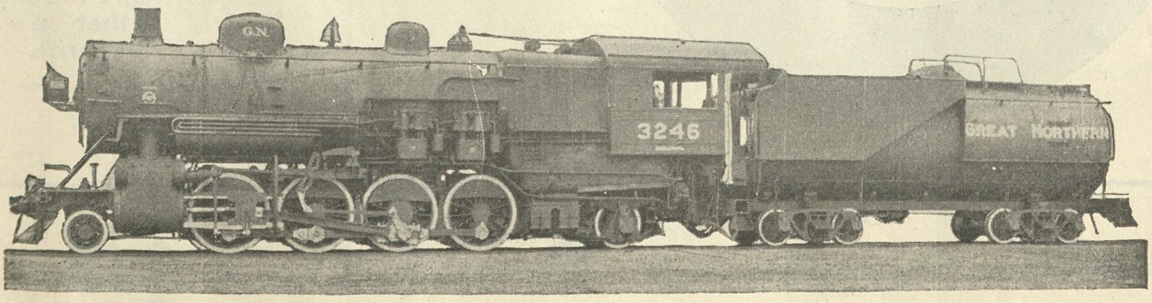
# Hauling Two Thousand Tons Over Grades of One Per Cent

Baldwin Mikado type locomotives have been used on the Great Northern since 1911. There are at the present time 190 in service on this railway.

The illustration shows engine No. 3219 hauling a train of 2000 tons between Havre and Cut Bank, Montana, over maximum grades of one per cent.

These locomotives are equipped with superheaters and arches, and are stoker fired.

3210-3254 Baldwin 1920

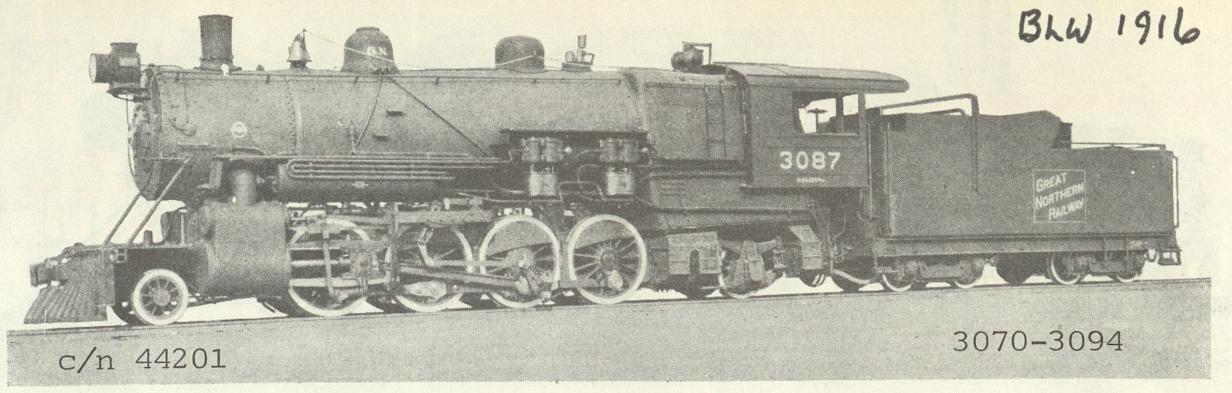


ONE OF THE LATEST BALDWIN MIKADOS BUILT FOR THE GREAT NORTHERN

Cylinders, 28″ x 32″
Drivers, diameter, 63″
Weight, total engine, 319,700 lbs.
Tractive force, 64,100 lbs.

c/n 53598

BLW 1916

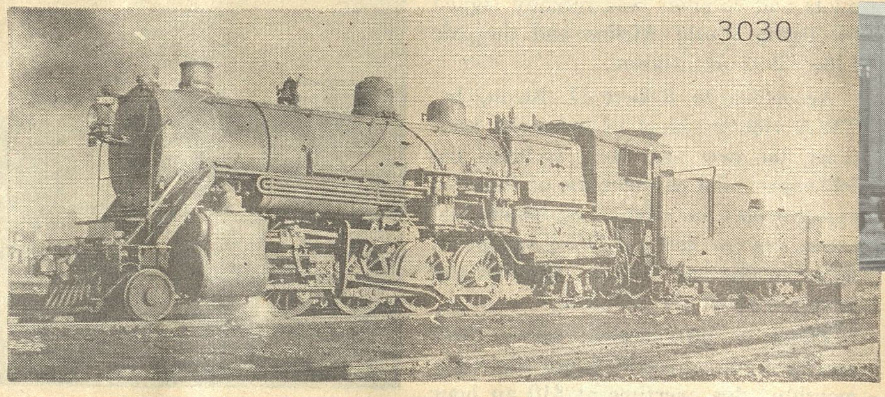


c/n 44201 3070-3094

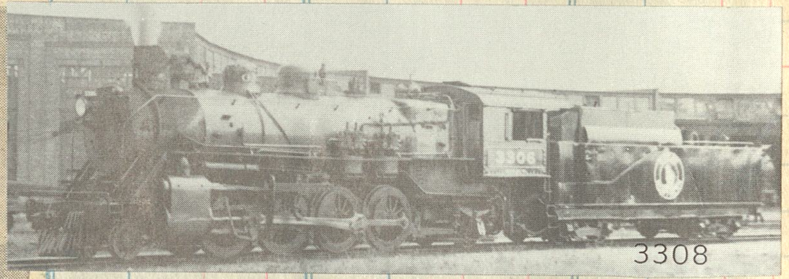
MIKADO FREIGHT LOCOMOTIVE

143 Locomotives like the above are being fired by Duplex Stokers and Street Stokers

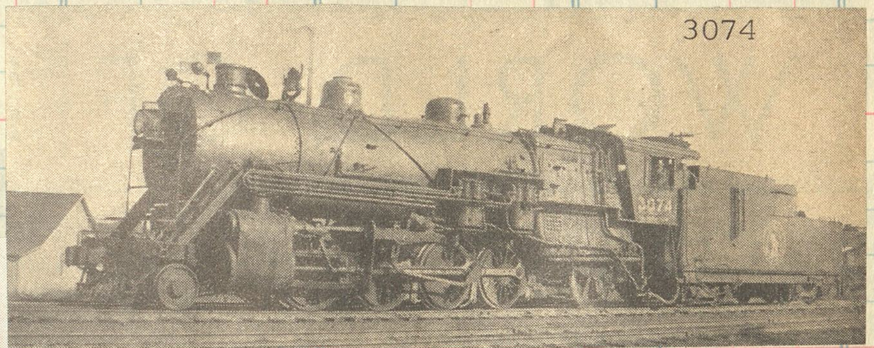
| | | | |
|---|---|---|---|
| Cylinders | 28 x 32 in. | Grate area | 78 sq. ft. |
| Driving wheels, diameter | 63 in. | Wheel base, driving | 16 ft.—9 in. |
| Steam pressure | 180 lbs. | " " engine | 35 ft.—0 in. |
| Boiler diameter | 82 in. | " " " and tender | 68 ft.—1 in. |
| Tubes, length | 21 ft. | Weight, leading | 25,000 lbs. |
| " number | 36—5½ in. | " driving | 220,000 lbs. |
| " " | 304—2 in. | " trailing | 35,000 lbs. |
| Heating surface, tubes | 4,431 sq. ft. | " engine | 280,000 lbs. |
| " " fire box | 244 sq. ft. | " tender (loaded) | 154,100 lbs. |
| " " total | 4,675 sq. ft. | Tender capacity, water | 8,000 gals. |
| " " superheater | 1,081 sq. ft. | " " coal | 13 tons |
| Fire box | 117 x 96 in. | Maximum tractive power | 60,928 lbs. |
| | | Factor of adhesion | 3.61 |



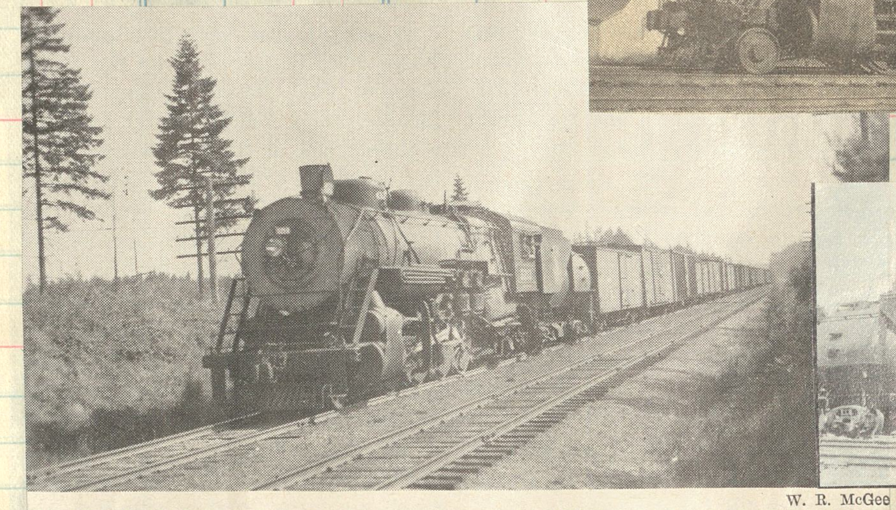
3030



3308

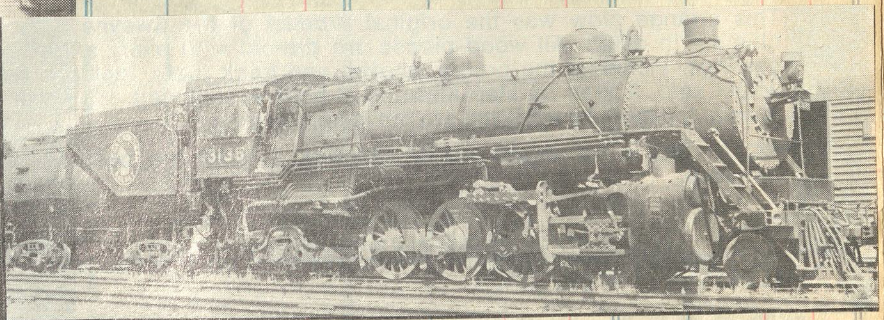


3074

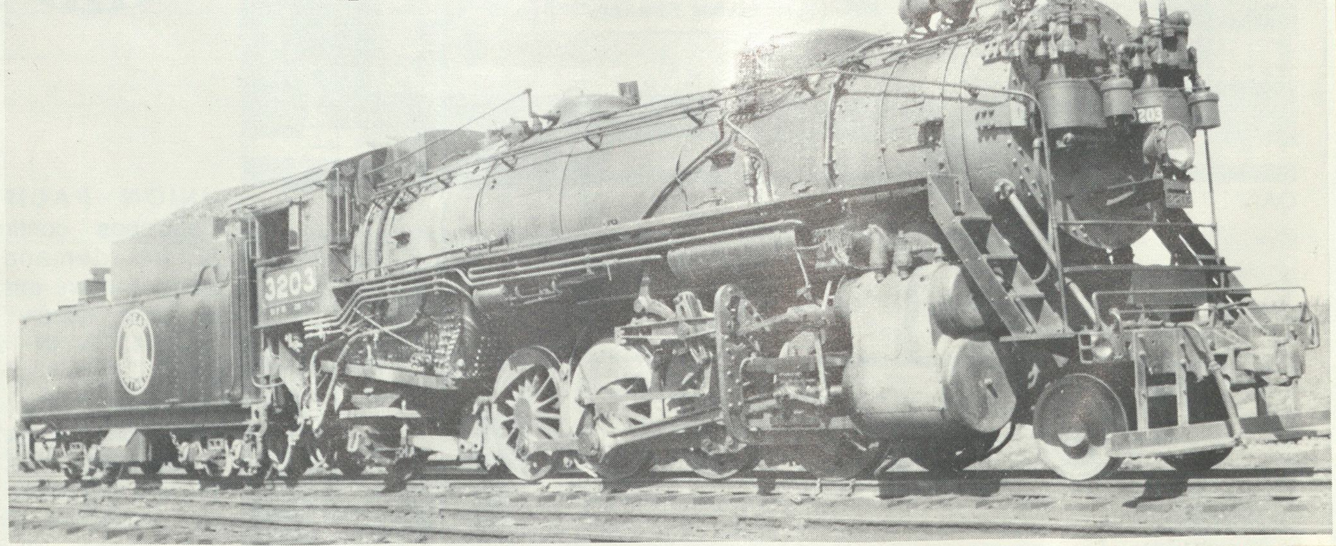


W. R. McGee

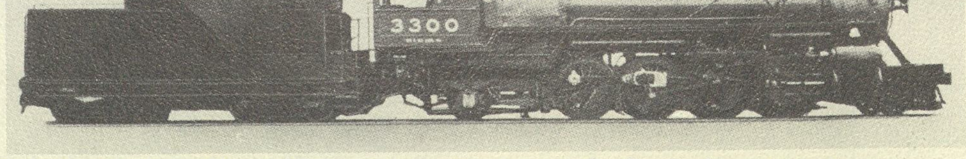
GREAT NORTHERN ENGINE 3213 HAULING NORTHBOUND FREIGHT NEAR NAPAVINE, WASH.



Blt at Schenectady 1919 as (USRA) GN 3148
c/n 61041. Same year renoed 3203



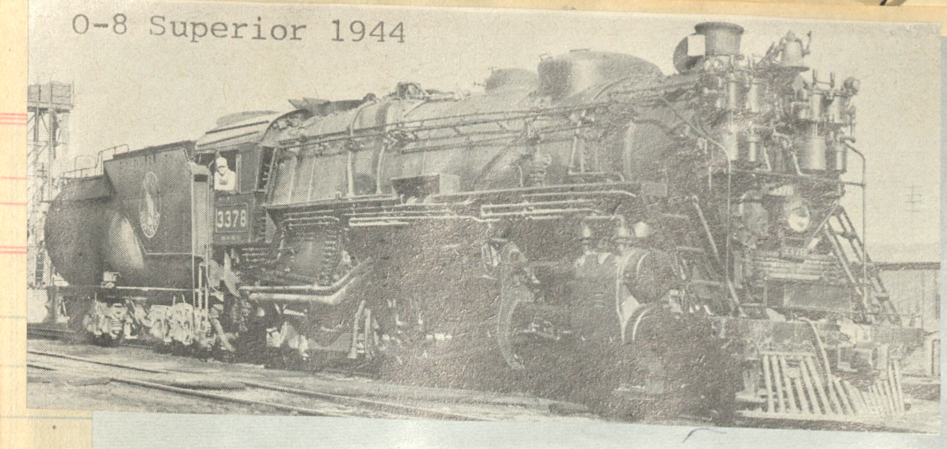
| | |
|---|---|
| Cylinders | 25″ x 30″ |
| Drivers, diam. | 63″ |
| Steam pressure | 200 lb. |
| Grate area | 53.4 sq. ft. |
| Water heating surface | 3071 sq. ft. |
| Superheating surface | 805 sq. ft. |
| Weight on drivers | 198,000 lb. |
| " total engine | 252,460 lb. |
| Tractive force | 50,600 lb. |

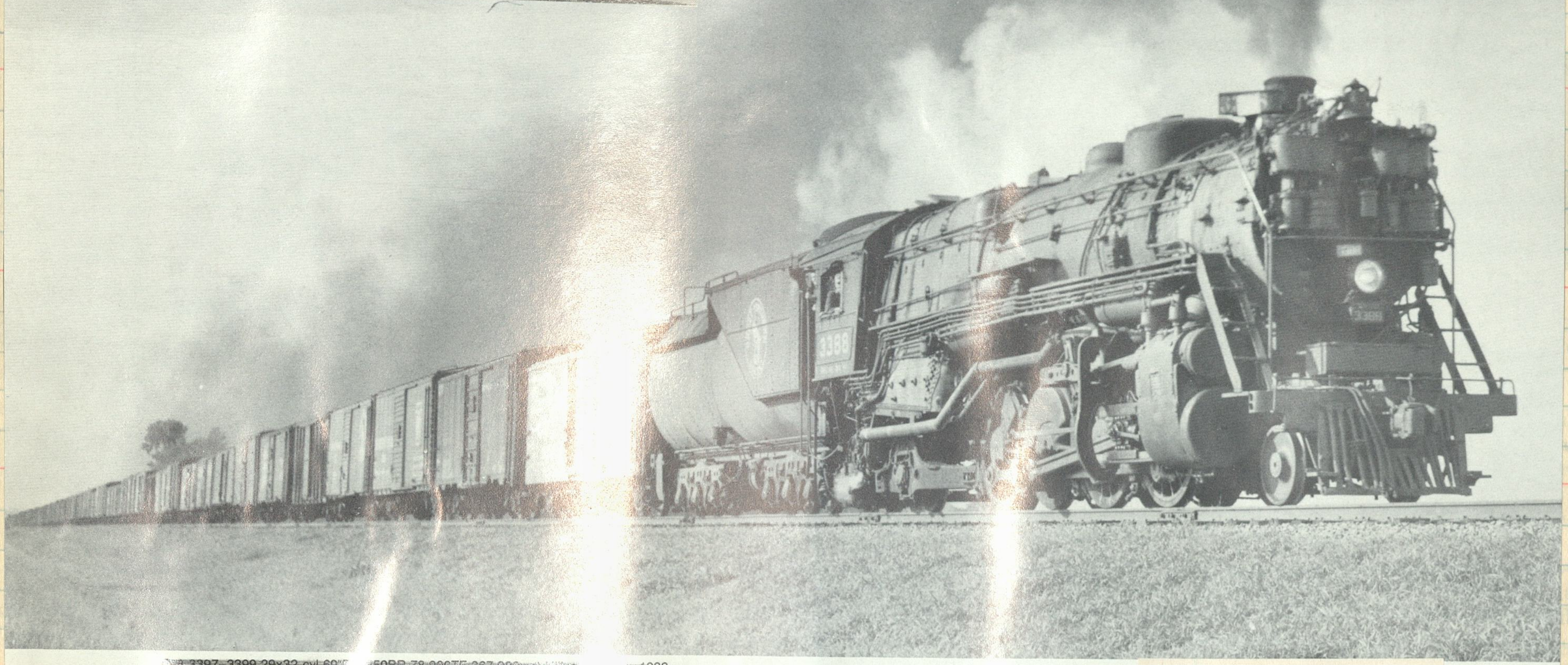


Reblt Dale St 1922 from former 2-6-6-2 #1802

**Mikado Type Locomotive, Class O-5, as Rebuilt by the Railway Company from a Class L-2 Mallet Locomotive**

O-8 Superior 1944



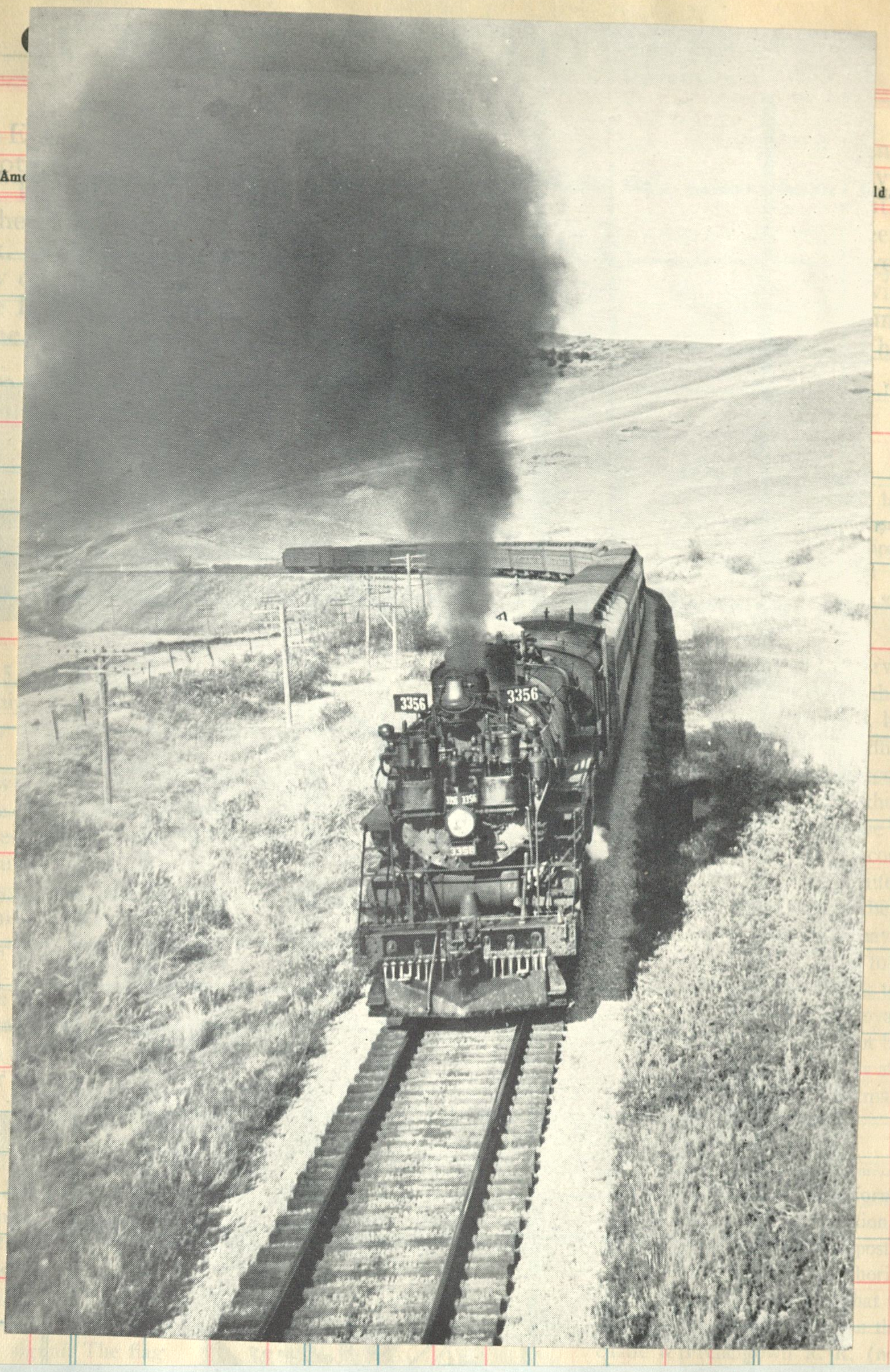


O-8 3397–3399 29x32 cyl 69" [illegible] 250BP 78,000TF 367,000wgt Hillyard [illegible] 1932

*Extra 3388 West roars across the prairie at Reynolds, N.D. with 108 empties on September 12, 1956.*

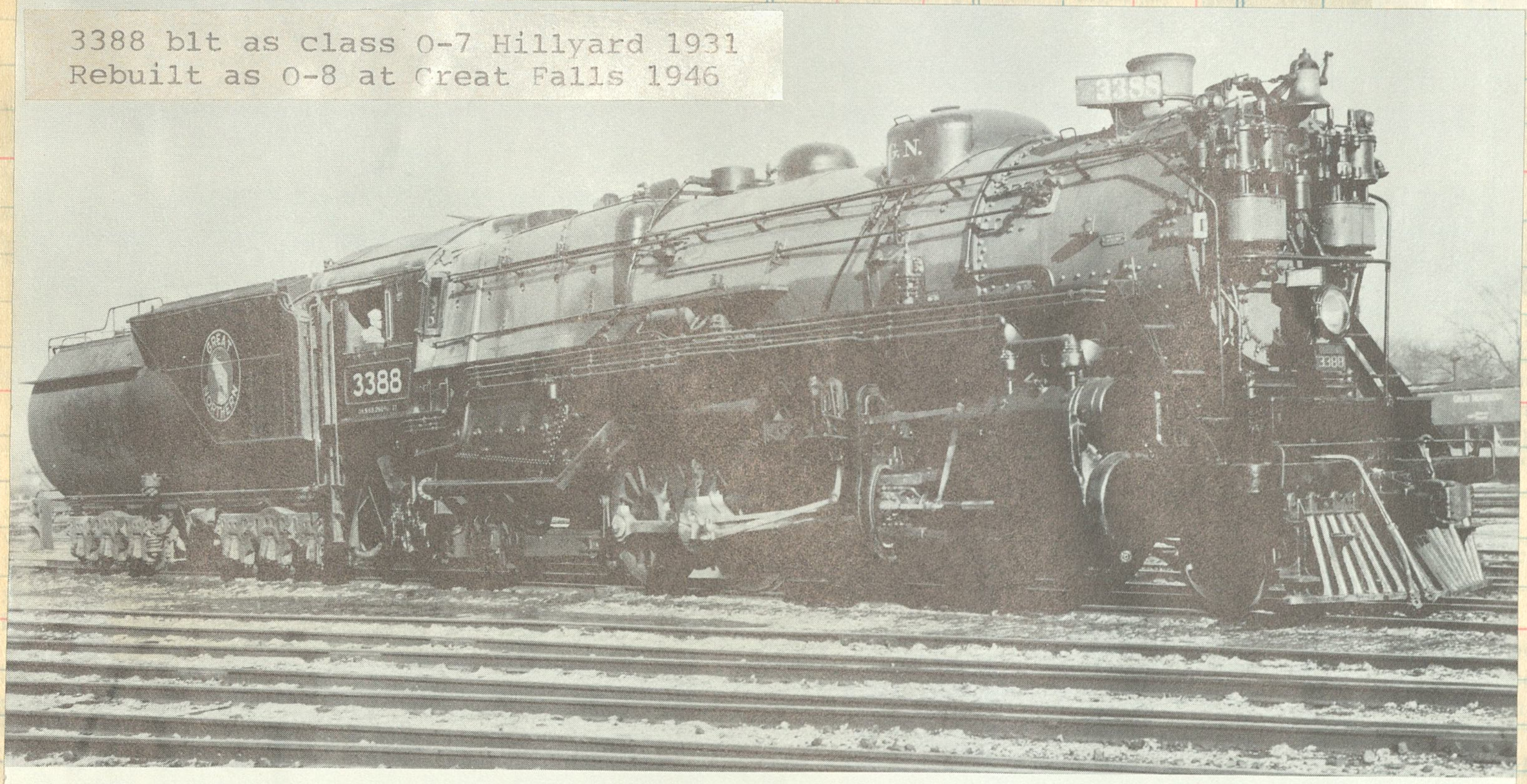
Joe G. Collias

O-8 3375-3398
Rebuilds 1944-46



One of the O-6 class Mikados, a rebuild from Delta 1925, works a troop train of 14 cars near Spotted Robe, Montana. Orginally was #1908 an L-1 2-6-6-2 built by Baldwin in 1908 c/n 32725

3388 blt as class O-7 Hillyard 1931
Rebuilt as O-8 at Great Falls 1946

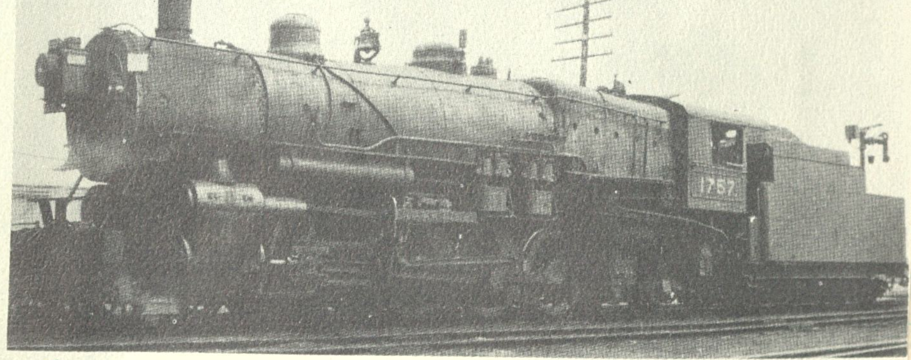


**THE BRUTE POWER APPEARANCE** of modern GN built steam power is typified by Mikado No. 3388, one of the O-8 class ~~built at Hillyard~~. The most powerful Mike ever built, rated at 75,900 lbs. tractive effort (without a booster), the O-8's were also the fastest of the GN freight engines thanks to the 69″ drivers and roller bearings. Some of the class were built with all weather cabs and utilized boilers from scrapped 2-6-8-0's. Others were equipped with conventional cabs and were essentially rebuilt Class O-7 Mikados. Three of the engines (3397, 3398, 3399) were constructed in 1931/32 while the remaining 22 engines were built in the early 1940's. (Great Northern Railway)

Reblt as 2-10-2 #2177 at Superior in 1928

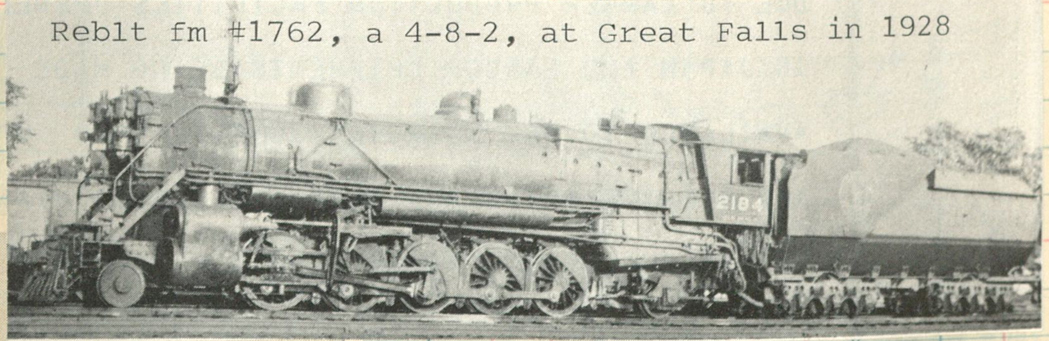
| | |
|---|---|
| Cylinders | 28″ x 32″ |
| Drivers, diam. | 63″ |
| Steam pressure | 180 lb. |
| Grate area | 78 sq. ft. |
| Water heating surface | 4547 sq. ft. |
| Superheating surface | 975 sq. ft. |
| Weight on drivers | 220,000 lb. |
| " total engine | 326,000 lb. |
| Tractive force | 60,930 lb. |

1750-1764

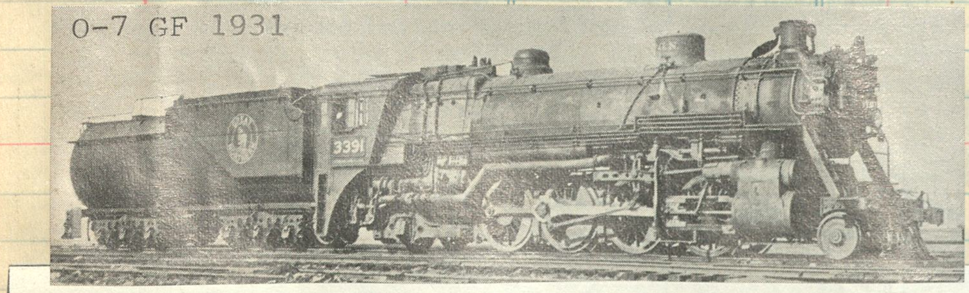


15 Mountain Type Locomotive, Class P-1, Built by the Lima Locomotive Works, Inc., 1914

Reblt fm #1762, a 4-8-2, at Great Falls in 1928



O-7 GF 1931



1923

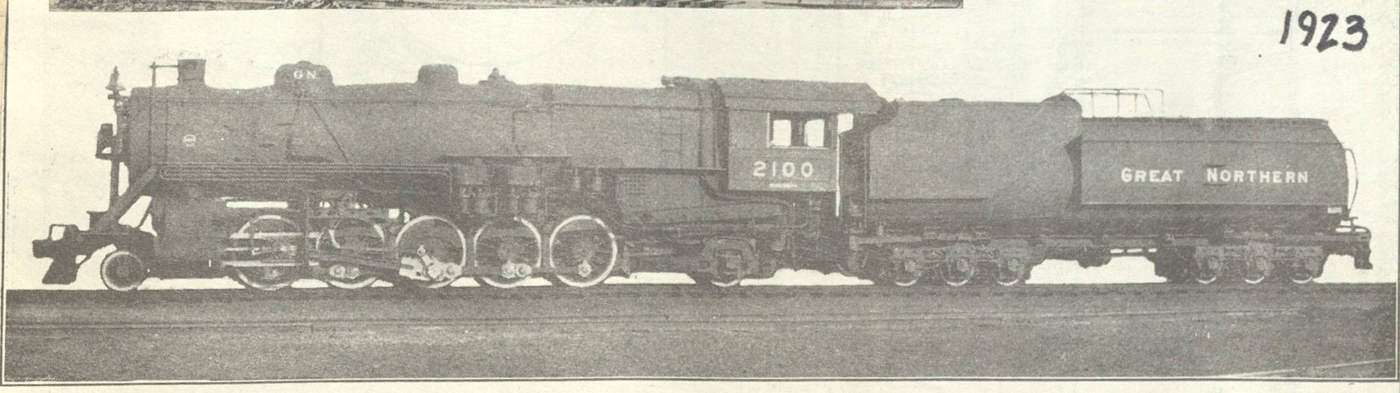
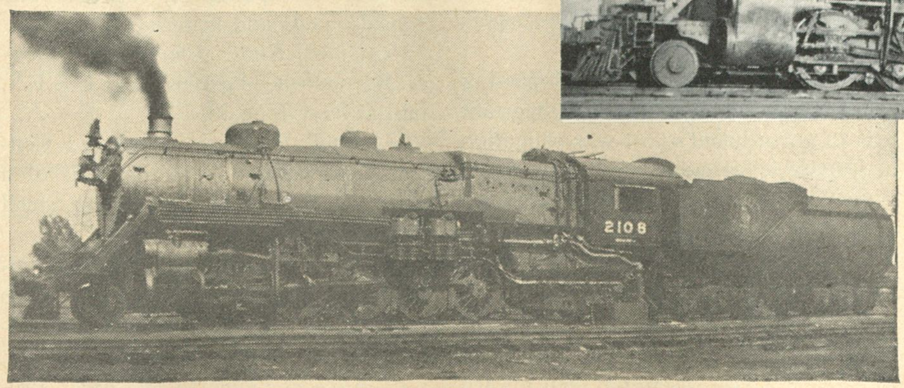
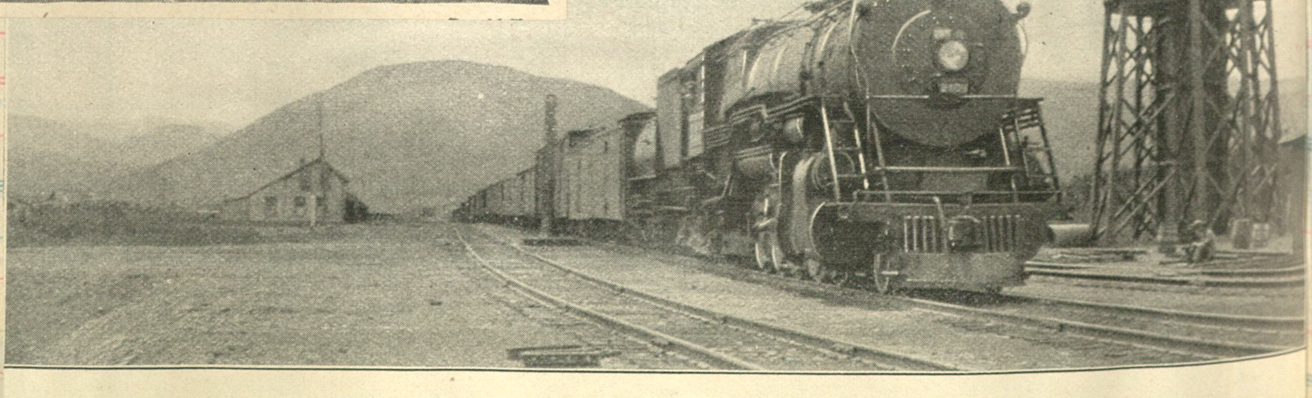


Fig. 113—Great Northern 2-10-2 (Santa Fe) Type Locomotive for Freight Service. Built by The Baldwin Locomotive Works.

c/n 57410 2100-2129

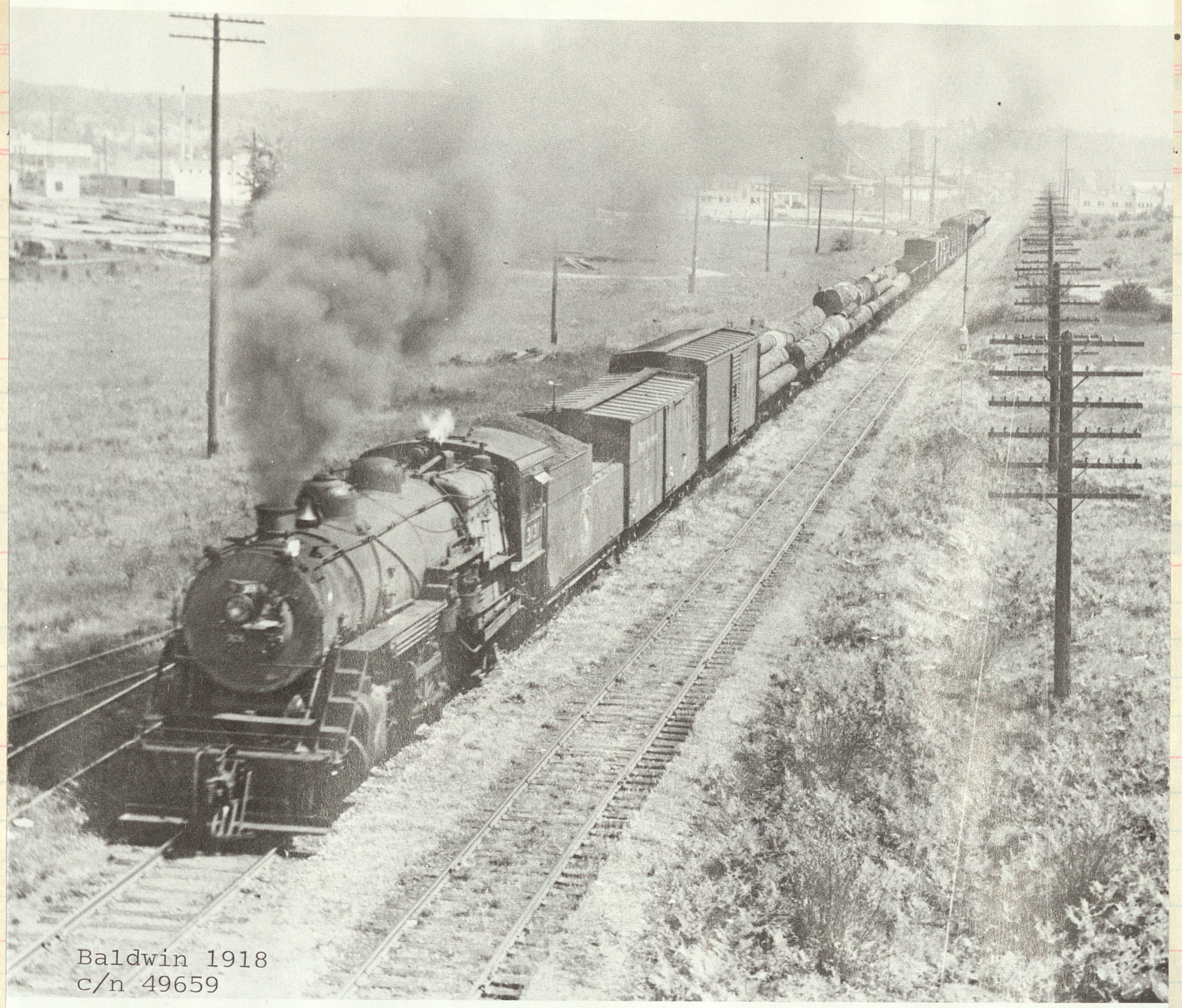
| | | | |
|---|---|---|---|
| Cylinders, diameter and stroke | 31 in. x 32 in. | Driving wheel base | 22 ft. 0 in. |
| Tractive force | 87,130 lb. | Total engine wheel base | 42 ft. 7 in. |
| Cylinder horsepower | 3,630 hp. | Fuel | Oil |
| Drivers, diameter | 63 in. | Grate area | 88 sq. ft. |
| Weight on drivers | 342,490 lb. | Steam pressure | 210 lb. |
| Weight on front truck | 24,720 lb. | Evaporative heating surface | 5,611 sq. ft. |
| Weight on trailing truck | 55,130 lb. | Superheating surface | 1,518 sq. ft. |
| Total weight of engine | 422,340 lb. | Tender capacity | 15,000 gal. water—5,000 gal. oil |





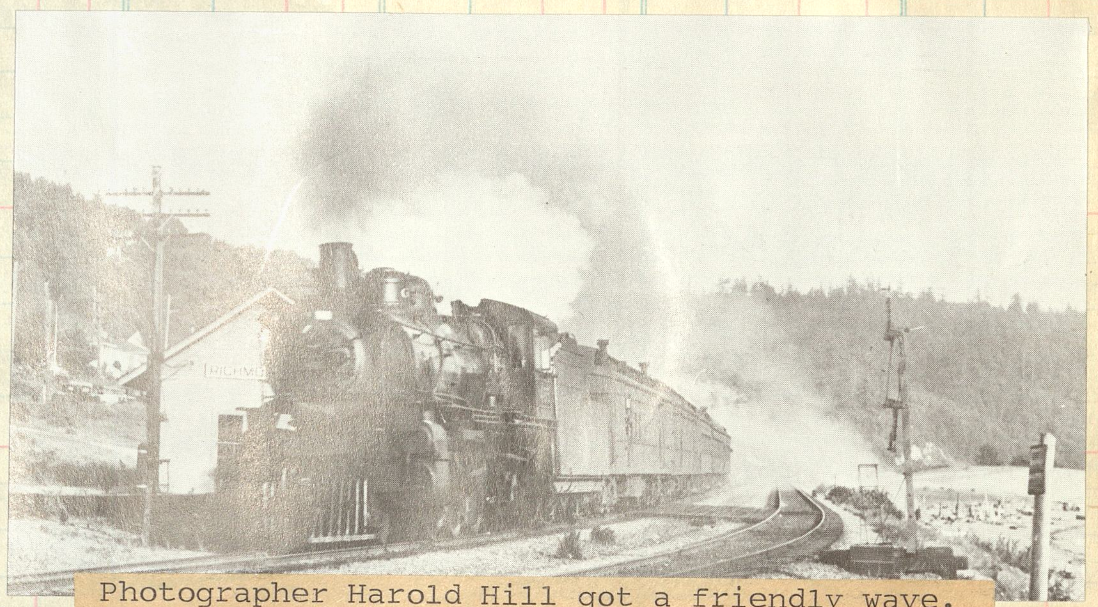
An East-bound Tonnage Train Crossing the Summit of the Continental Divide.

Clos. No. Sold Amount Clos. No. Sold


Baldwin 1918
c/n 49659

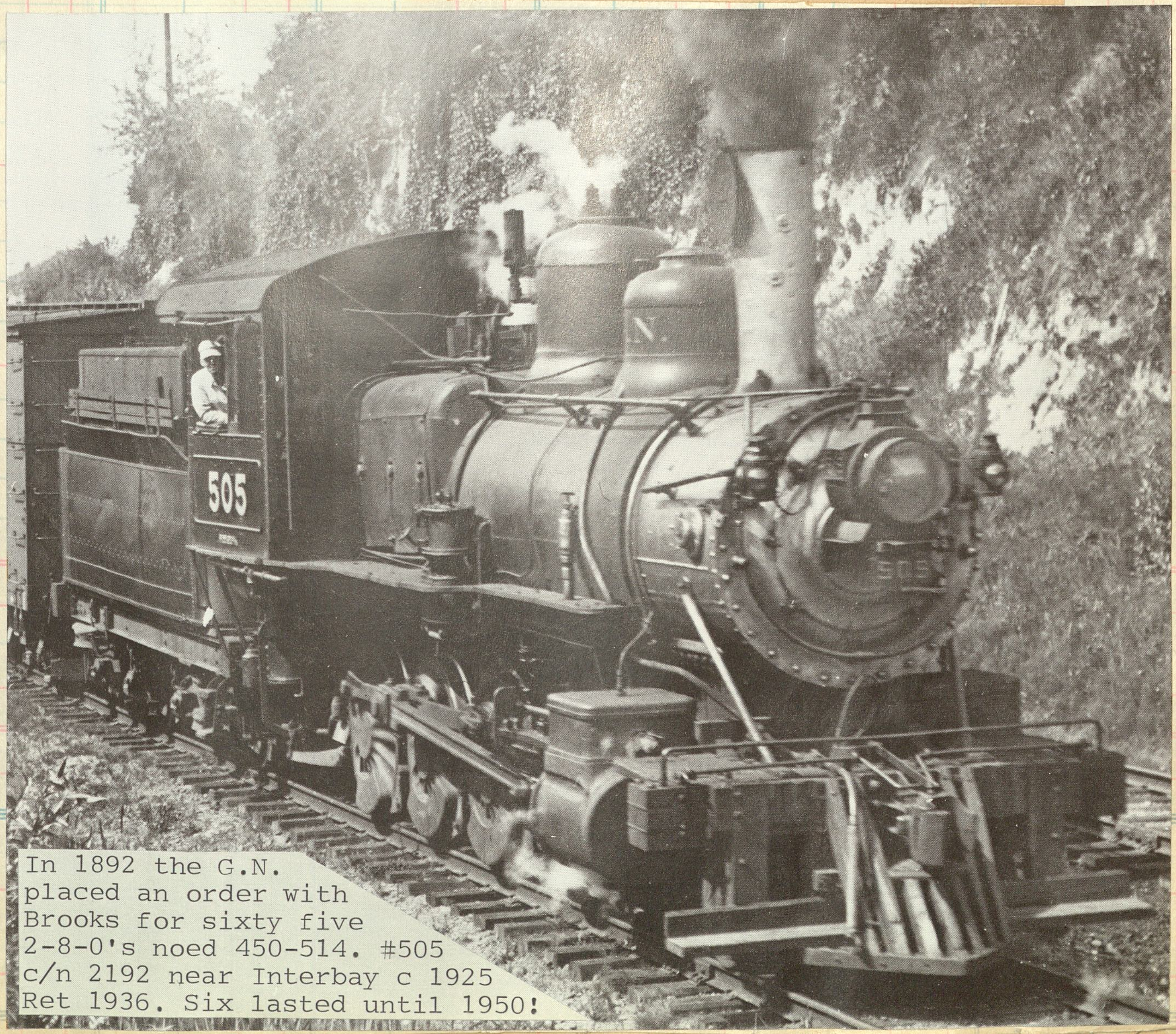
GN #3131 heads through South Tacoma with a local freight in the 30's.

Emery J. Roberts


Photographer Harold Hill got a friendly wave, which was characteristic in those days, from the fireboy of the International Limited as it raced thru Richmond Beach.

James A. Turner

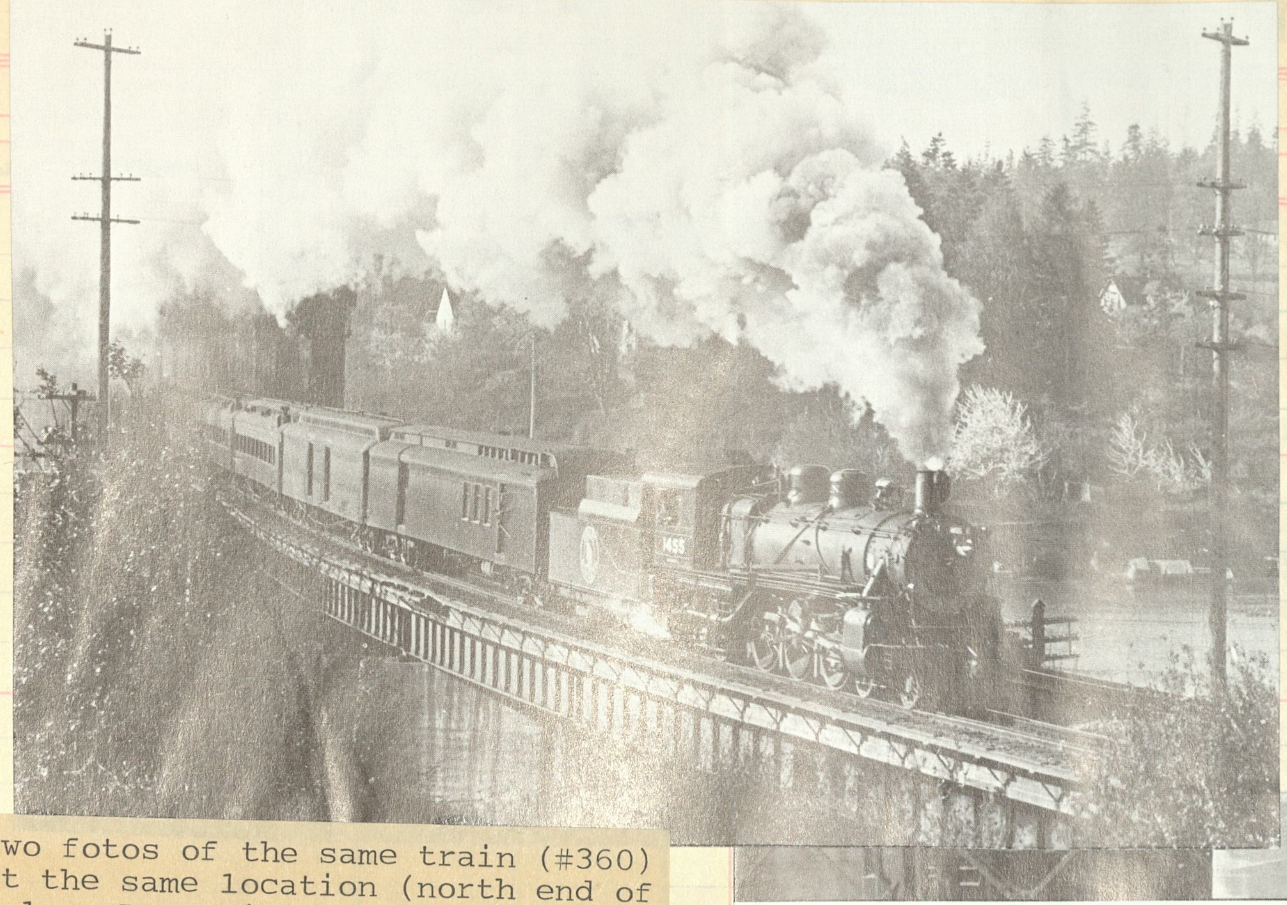
An O-4 Mike [Baldwin 1920] rolls some high cars along Puget Sound bound for the yard at Interbay.

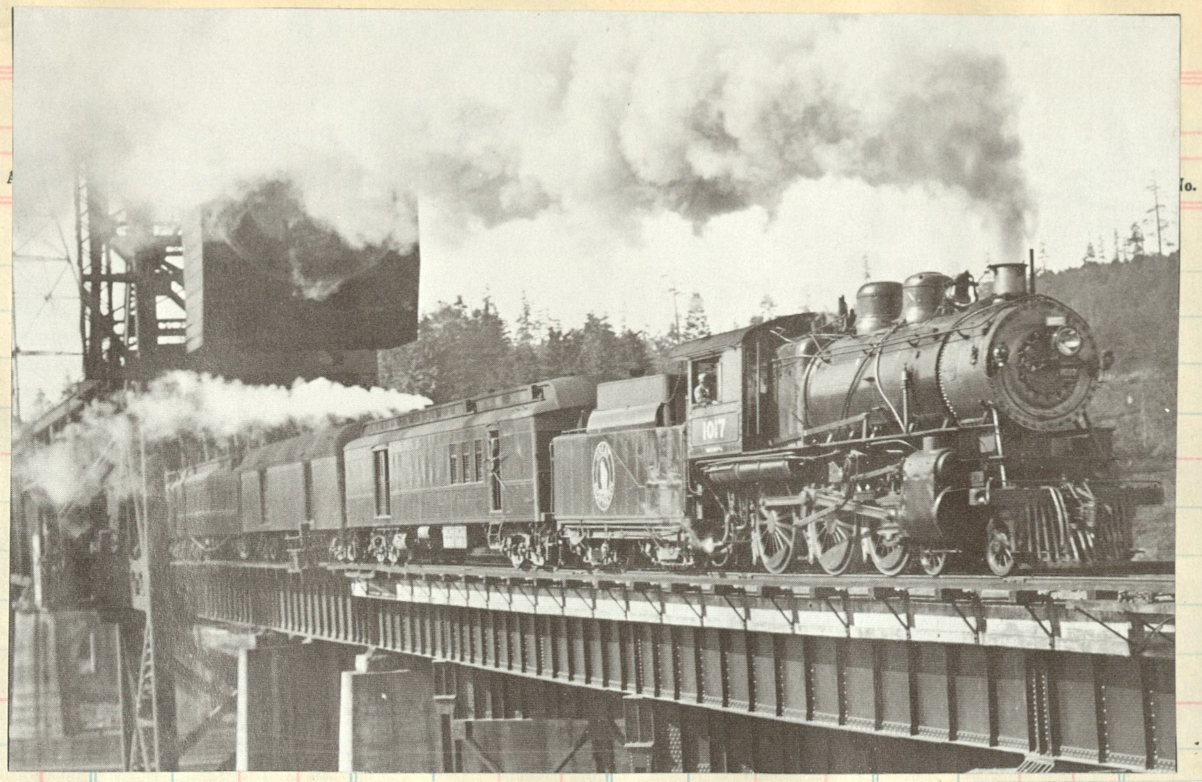


In 1892 the G.N. placed an order with Brooks for sixty five 2-8-0's noed 450-514. #505 c/n 2192 near Interbay c 1925 Ret 1936. Six lasted until 1950!

152

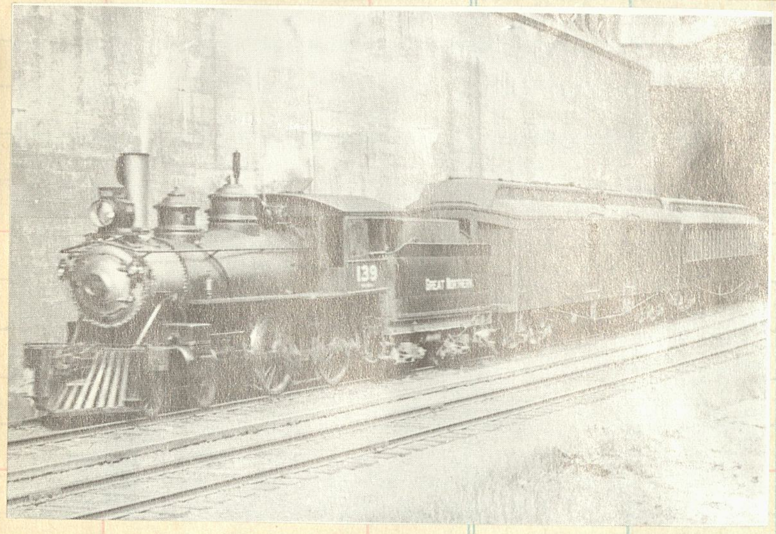
SELLER
DATE
FORM



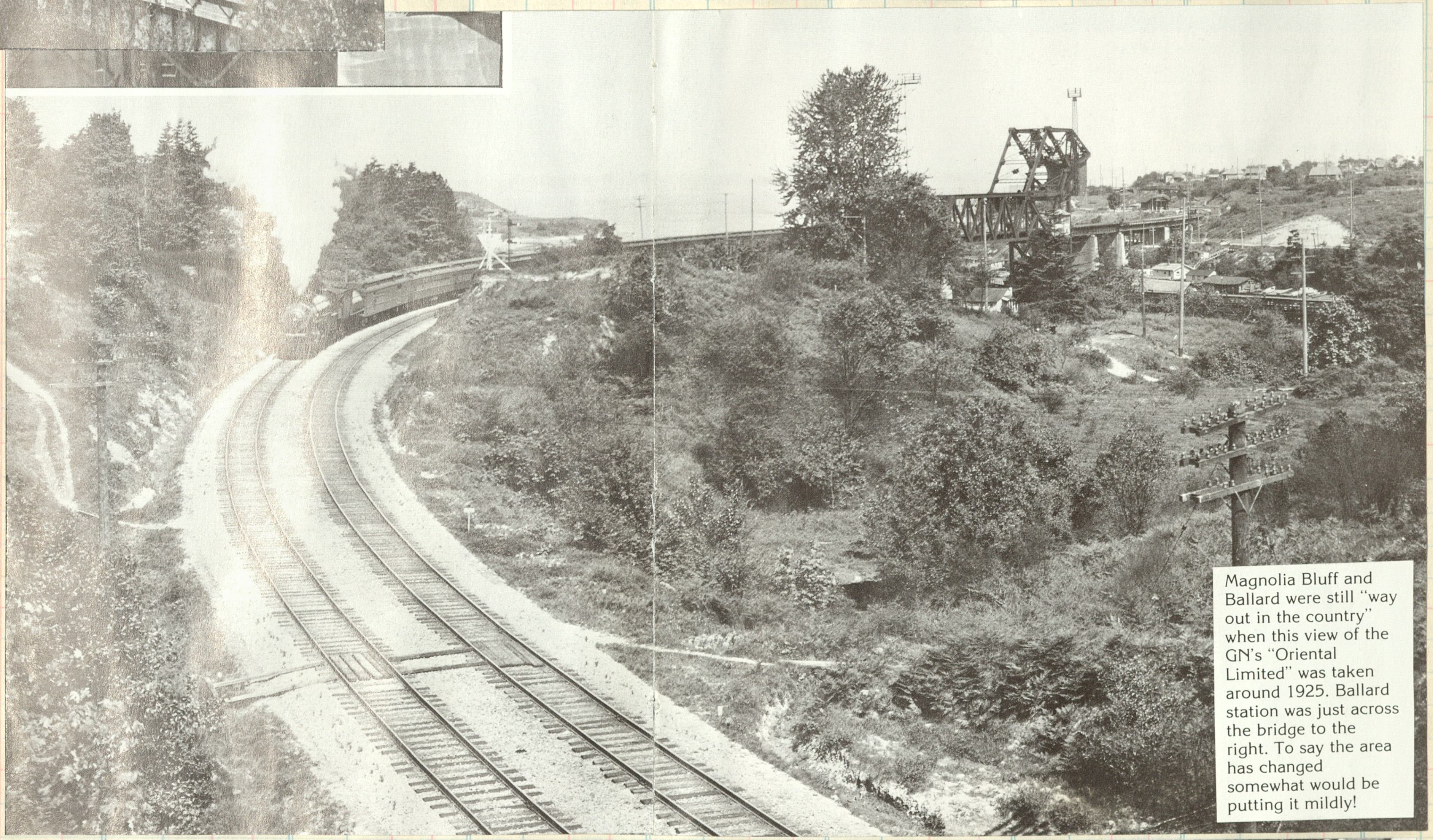


o. Sold Amount Clos. No. Sold Amoun

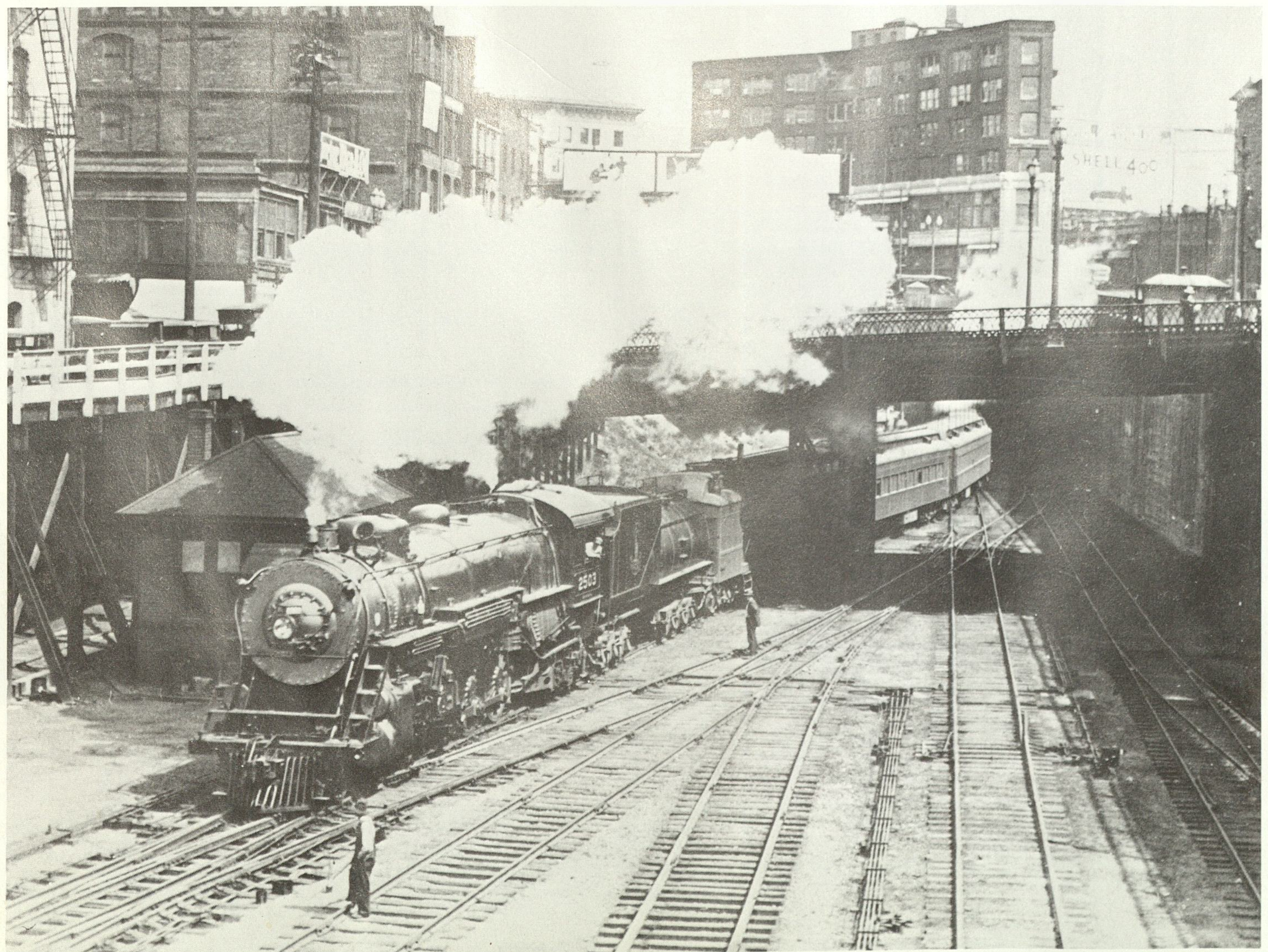
Two fotos of the same train (#360) at the same location (north end of Salmon Bay bridge at Ballard, Wn.) by Jim Turner. Above-Pacific 1455 a Baldwin product of 1909 cn 33361 does the honors while at right the 1017 class E-14 10 wheeler, also from Baldwin in 1909, has the assignment. In 1927 was reblt as a 4-6-2 and noed 1372



Trn 278 at north end of the Seattle tunnel

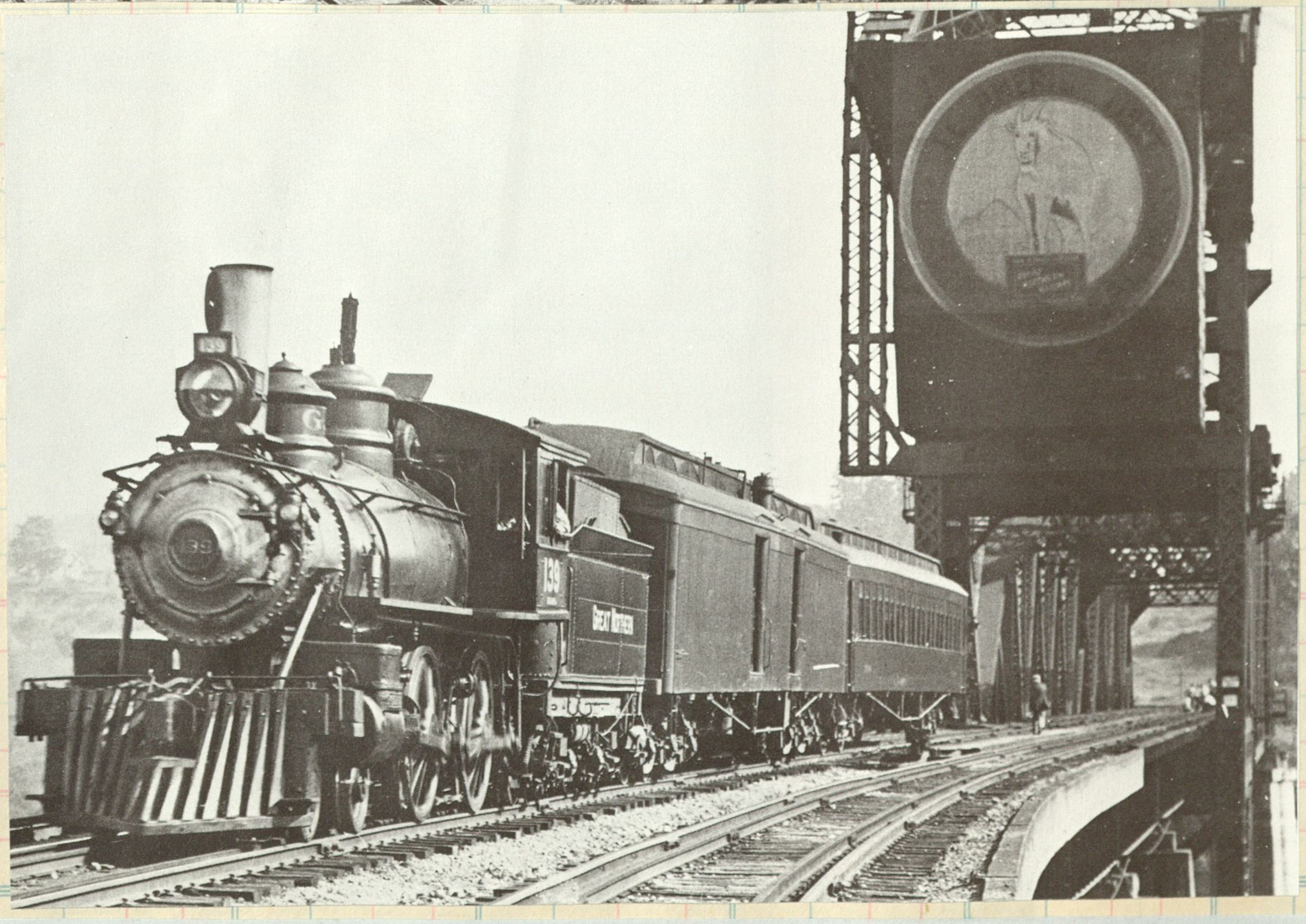


Magnolia Bluff and Ballard were still "way out in the country" when this view of the GN's "Oriental Limited" was taken around 1925. Ballard station was just across the bridge to the right. To say the area has changed somewhat would be putting it mildly!



The Great Northern's "Empire Builder" arriving at King Street.

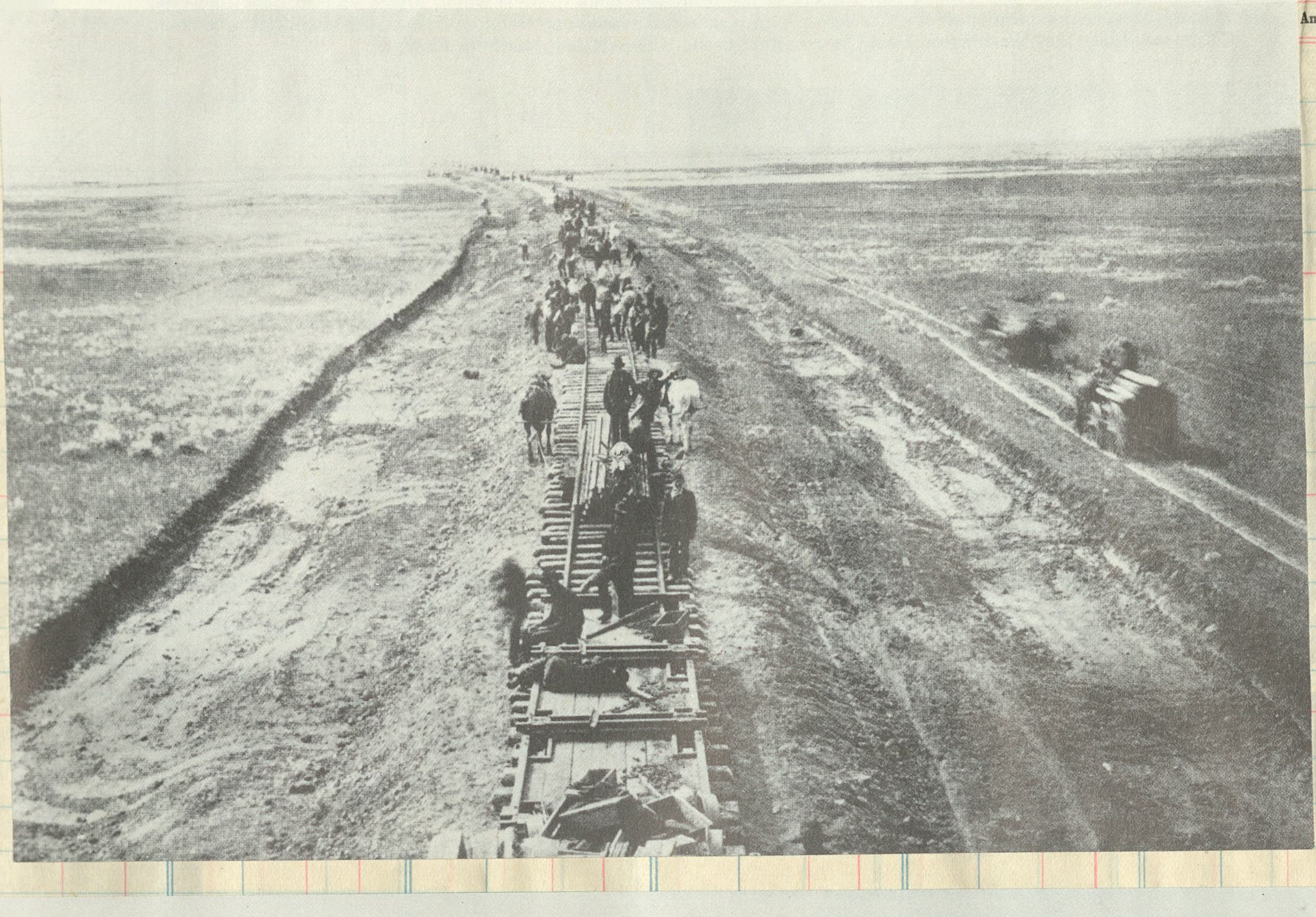
James A. Turner

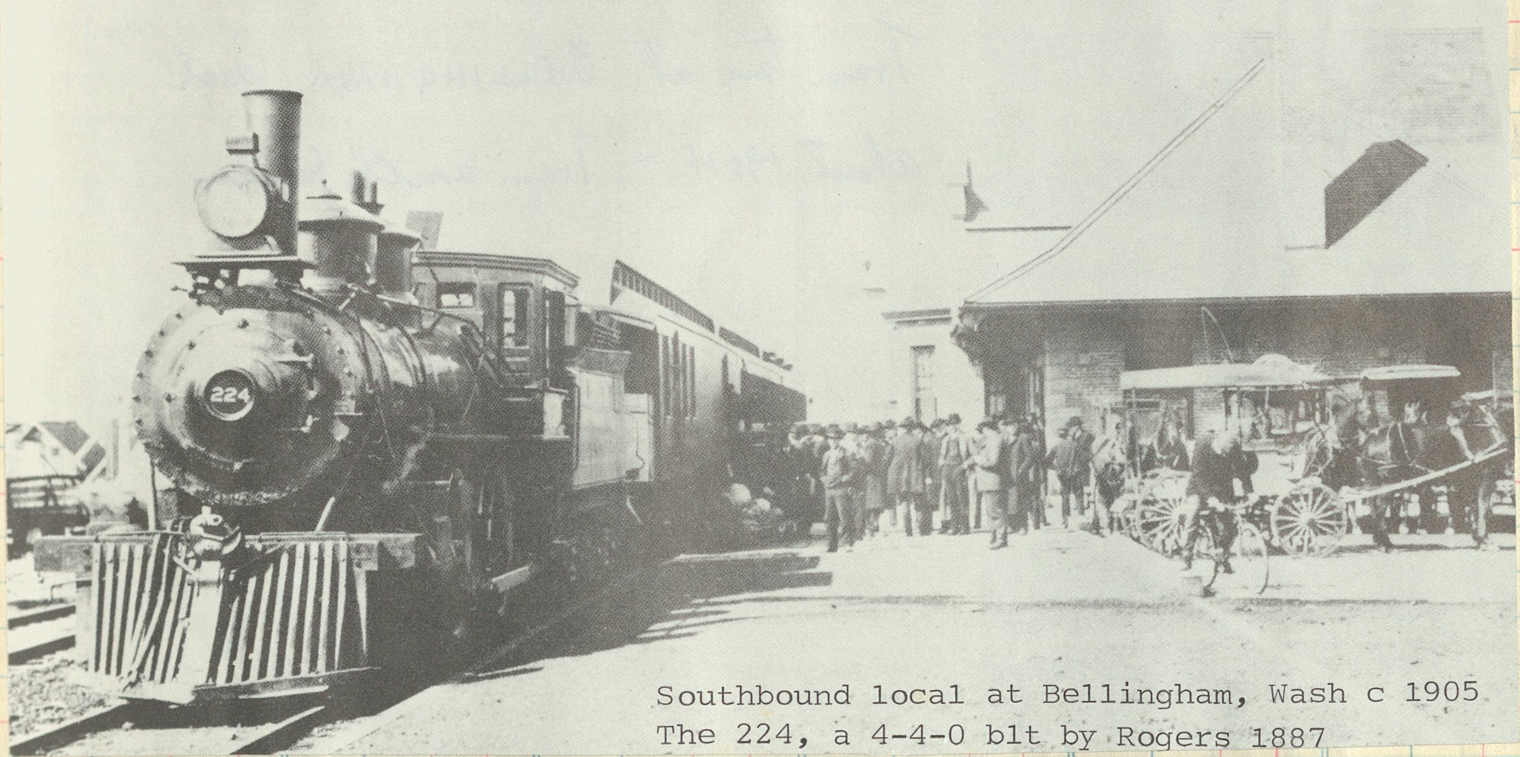


Not the "Oriental Limited" but far more fascinating was the little Seattle-Skykomish local #278 as she rolls across the Salmon Bay bridge. The 139, doing the honors, had a rather interesting history. Built by New York (Rome) in 1890, c/n 627, as Seattle & Northern #2. In 1902 became the Seattle & Montana #139. Went to the G.N. as 2nd #139 in 1907 and in 1908 received a new boiler from Baldwin. In Jan 1930 she destroyed herself when she blew up at Mukilteo, Wn.

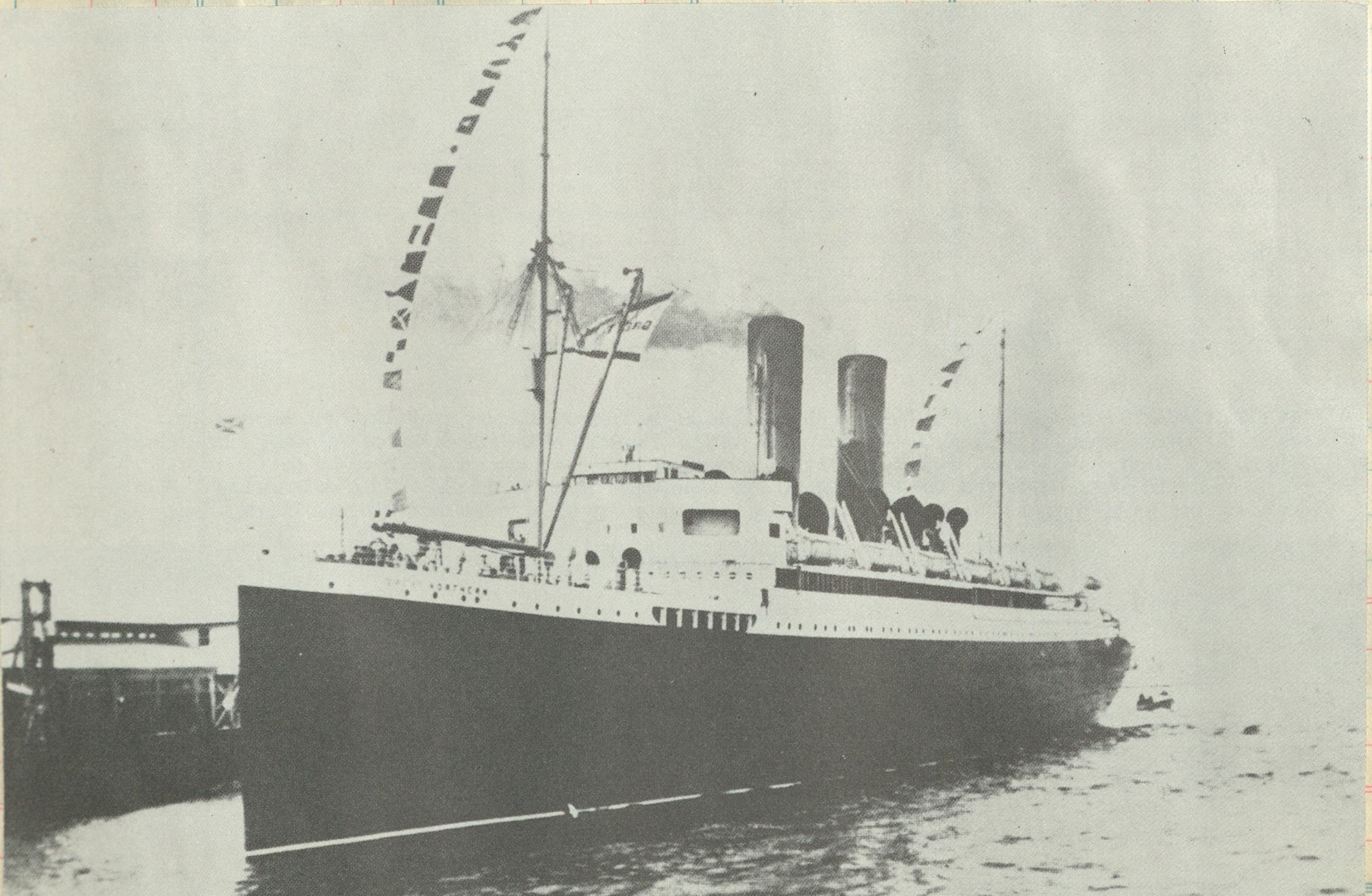
Clas. No. Amount Amount

**OUT ON THE SEEMINGLY LIMITLESS PRAIRIE** west of Minot, North Dakota in 1887 track laying teams spiked down the rails of the Manitoba. Material trains brought the rails, ties and other supplies to within a half mile of the rail head and iron cars, drawn by horses, moved the rails to the end of track, while teams went ahead with ties and timbers for bridges. By such methods a surprising amount of distance could be covered. On one day, August 11, 1887, 44,100′ or a little more than 8⅓ miles of track were laid~~—a world's record~~. (Great Northern Railway)

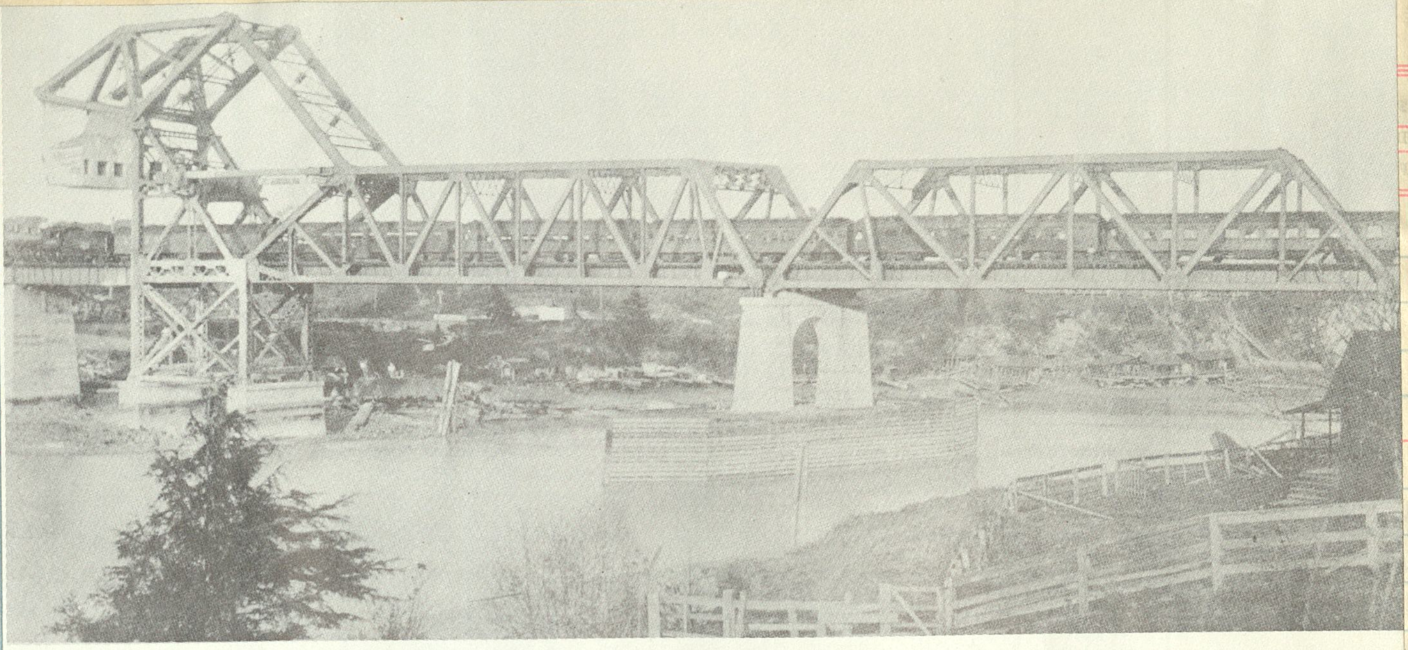




Southbound local at Bellingham, Wash c 1905
The 224, a 4-4-0 blt by Rogers 1887



**THE GREAT NORTHERN STEAMSHIP COMPANY** organized by Hill in 1900, and the Great Northern Pacific Steamship Company organized in 1914 after the completion of the Spokane Portland & Seattle Railway (a joint venture of the GN & NP), were respectively: a Trans-Pacific carrier and an Oregon to California coastwise carrier. Here, the steamship Great Northern departs from Astoria, Oregon on its maiden voyage to San Francisco in 1915. Two sister ships joined the Great Northern in the same year.



**A NORTHBOUND PASSENGER TRAIN** in the early 1920's crosses the Salmon Bay drawbridge over the ship canal between Seattle and the suburb of Ballard. The monstrous Bascule drawspan is still in service in the 1960's and provides the Great Northern with direct access to Seattle from the north along Puget Sound. (Great Northern

92

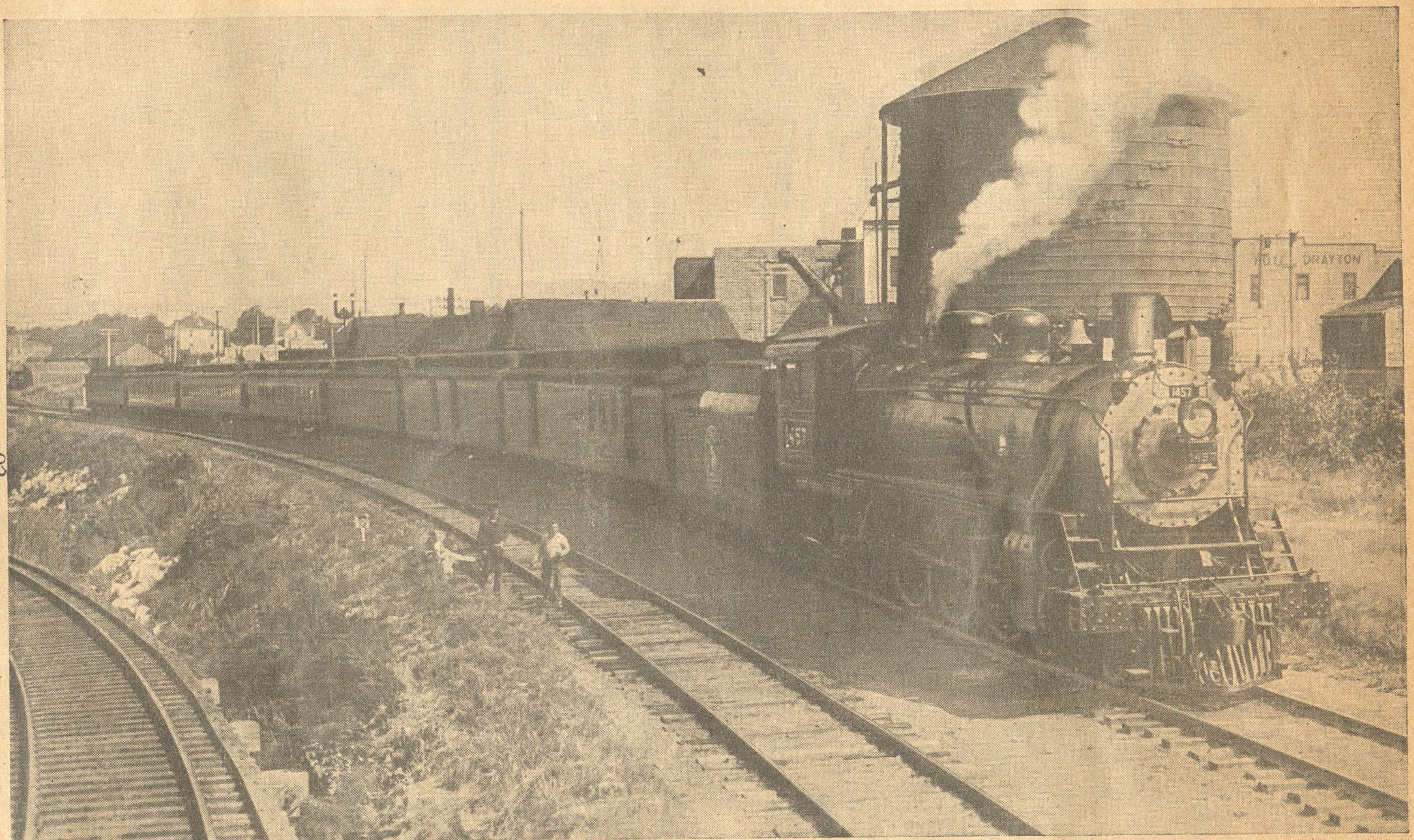
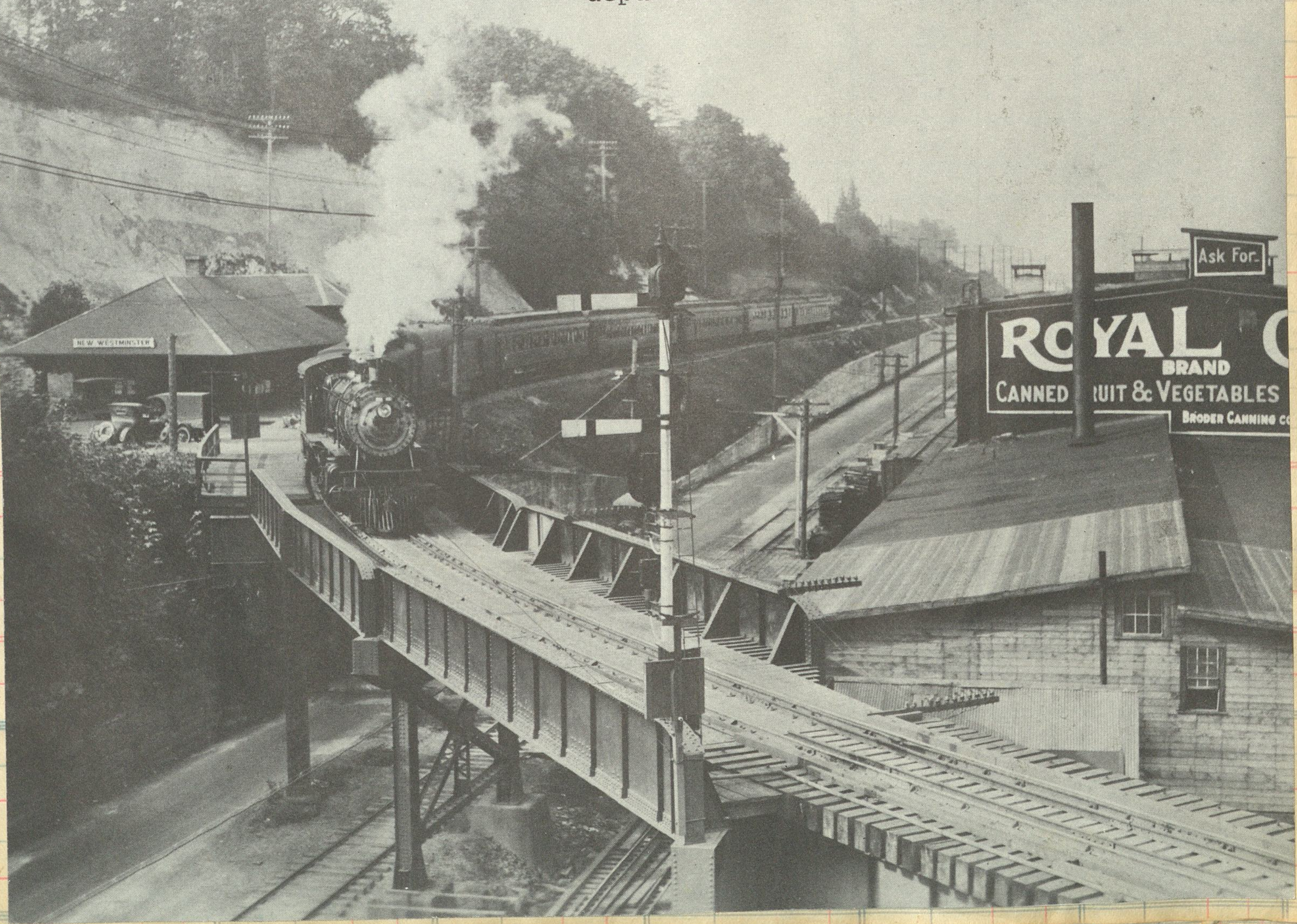


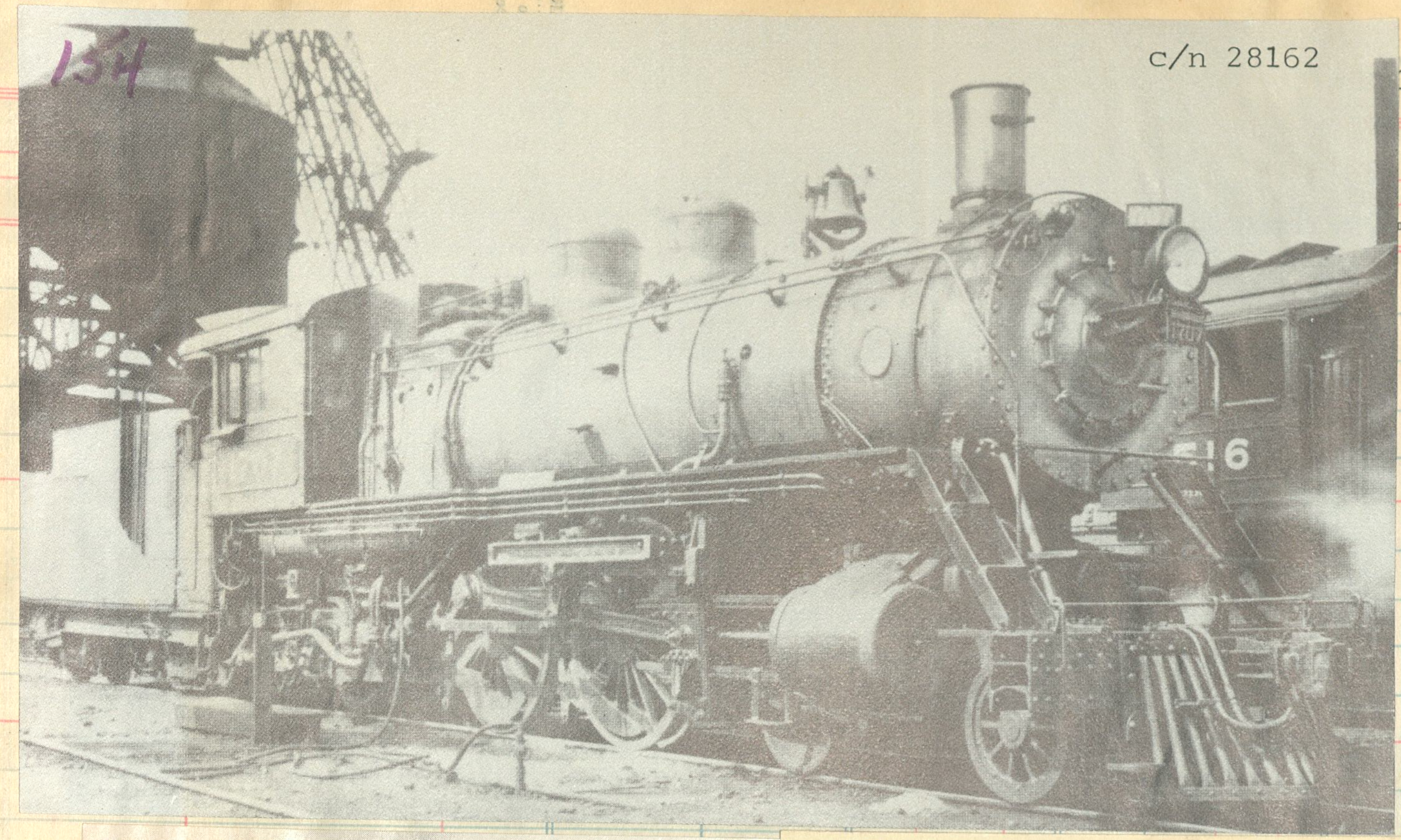
*Photo snapped Aug. 9, 1934, by R. E. Collons, 5220 Cornell Ave., Chicago*

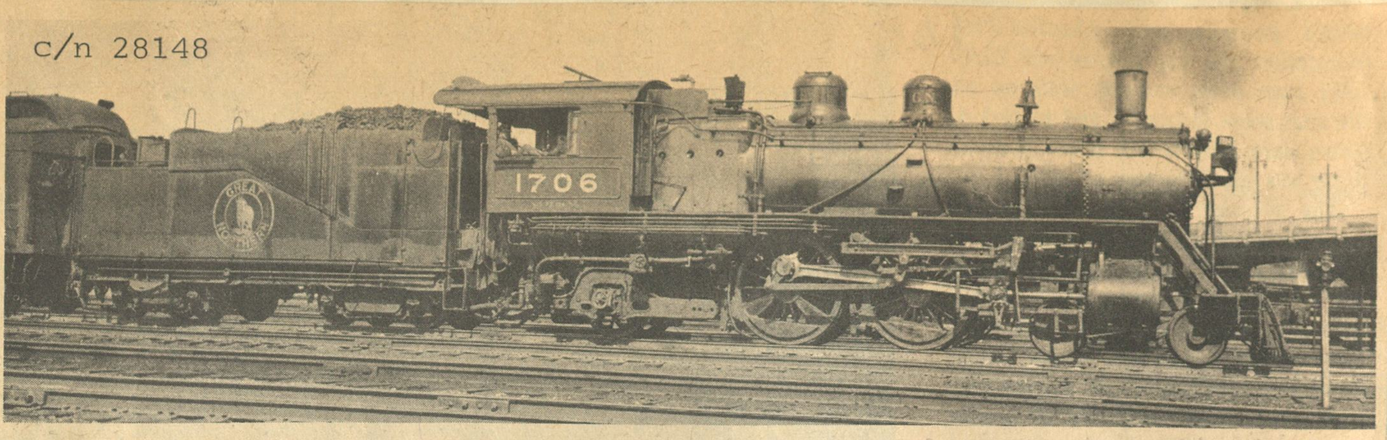
HALTED at the border (Blaine, Wash.) for U. S. customs inspection. The Great Northern train, ~~engine~~ 359, was en route from Vancouver, B. C., to Seattle, Wash.

#359 makes a station stop at the joint CNR-GN depot at New Westminster and soon will depart over the bridge crossing Fraser R.



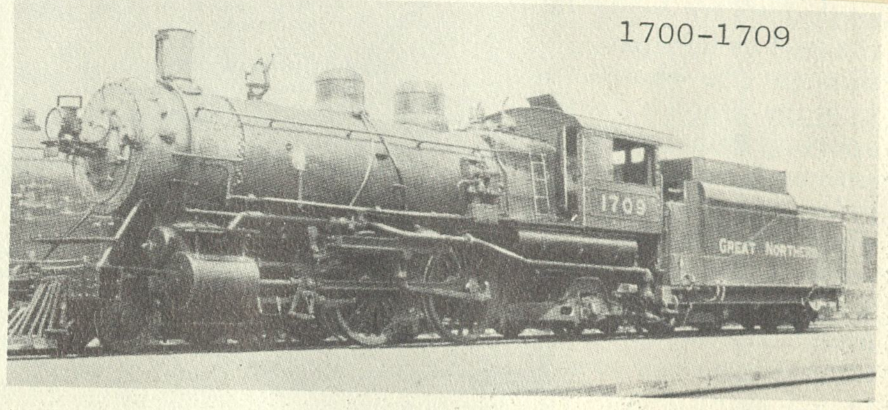
154


c/n 28162


c/n 28148

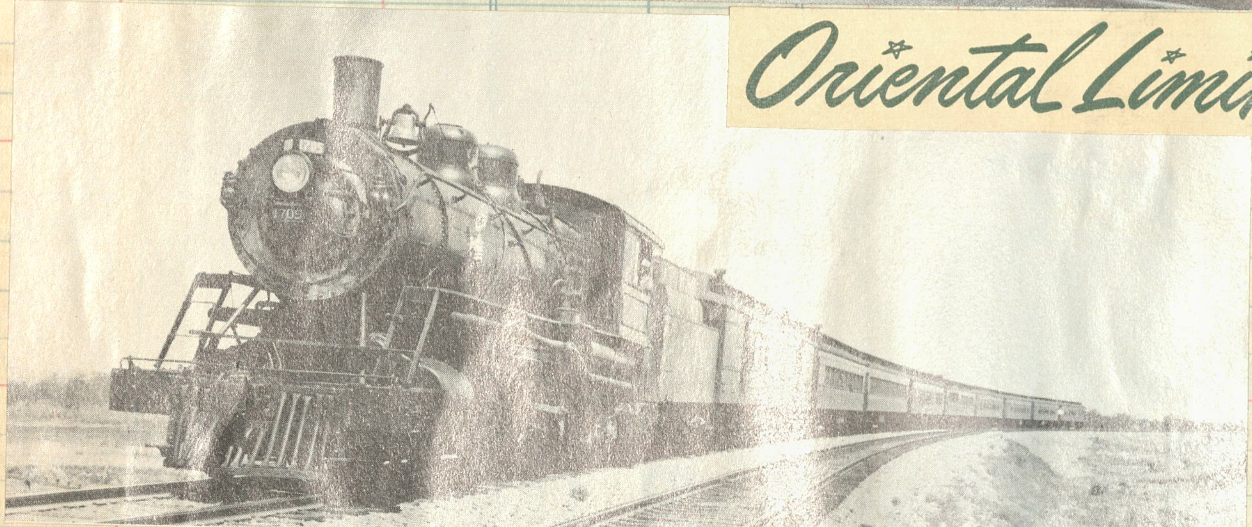
This locomotive was originally built by The Baldwin Locomotive Works in 1906, and was a duplicate of engine 1700, illustrated on page 18. As rebuilt, it has single expansion 21″ x 26″ cylinders and Walschaerts valve gear. The starting tractive force, with booster in operation, is 33,000 pounds. The locomotive now burns oil for fuel, and is in fast passenger service on the Montana Division. (1924)

c/n 28270

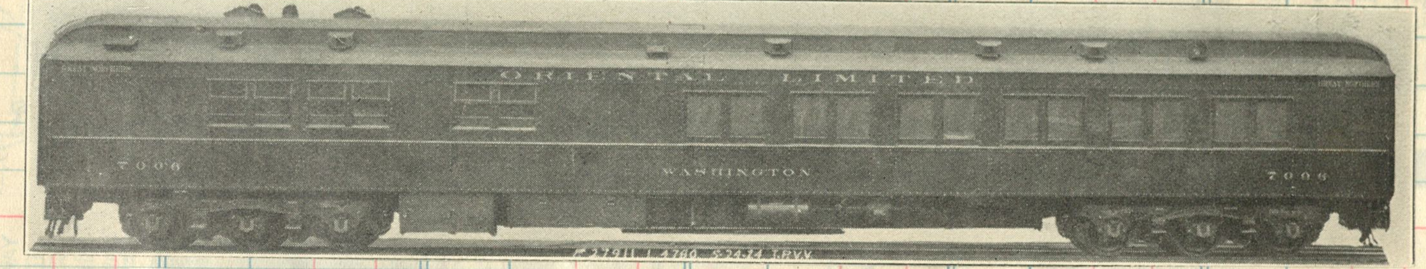

1700-1709

Atlantic Type Locomotive, Class K-1-s, as Rebuilt by the Railway Company with Superheater and Booster

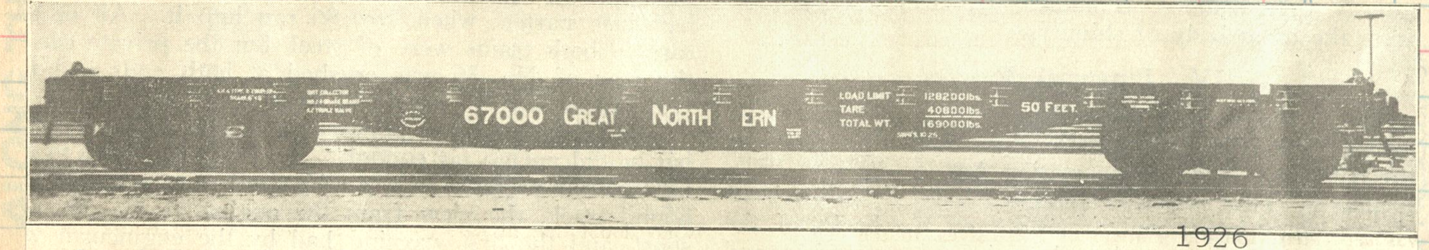
*Oriental Limited*



Even after the 4-8-2's had been received these Atlantics continued in main line passenger service over 200 miles of the Montana Division between Harve and Wolf Point. Handled the "Oriental Limited", normal consist was nine cars of the standard heavyweight design, train weight of 570 tons!!

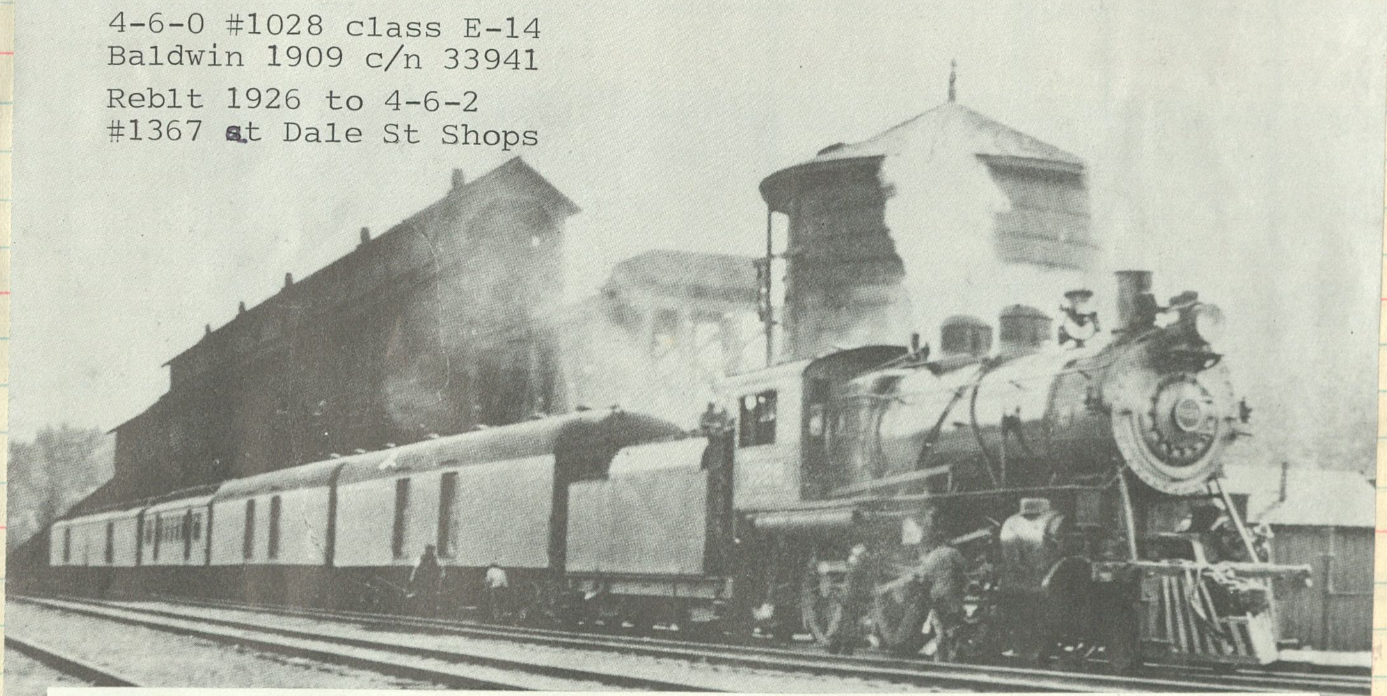


80 ft 36 seat diner "Washington" built by Pullman 1924

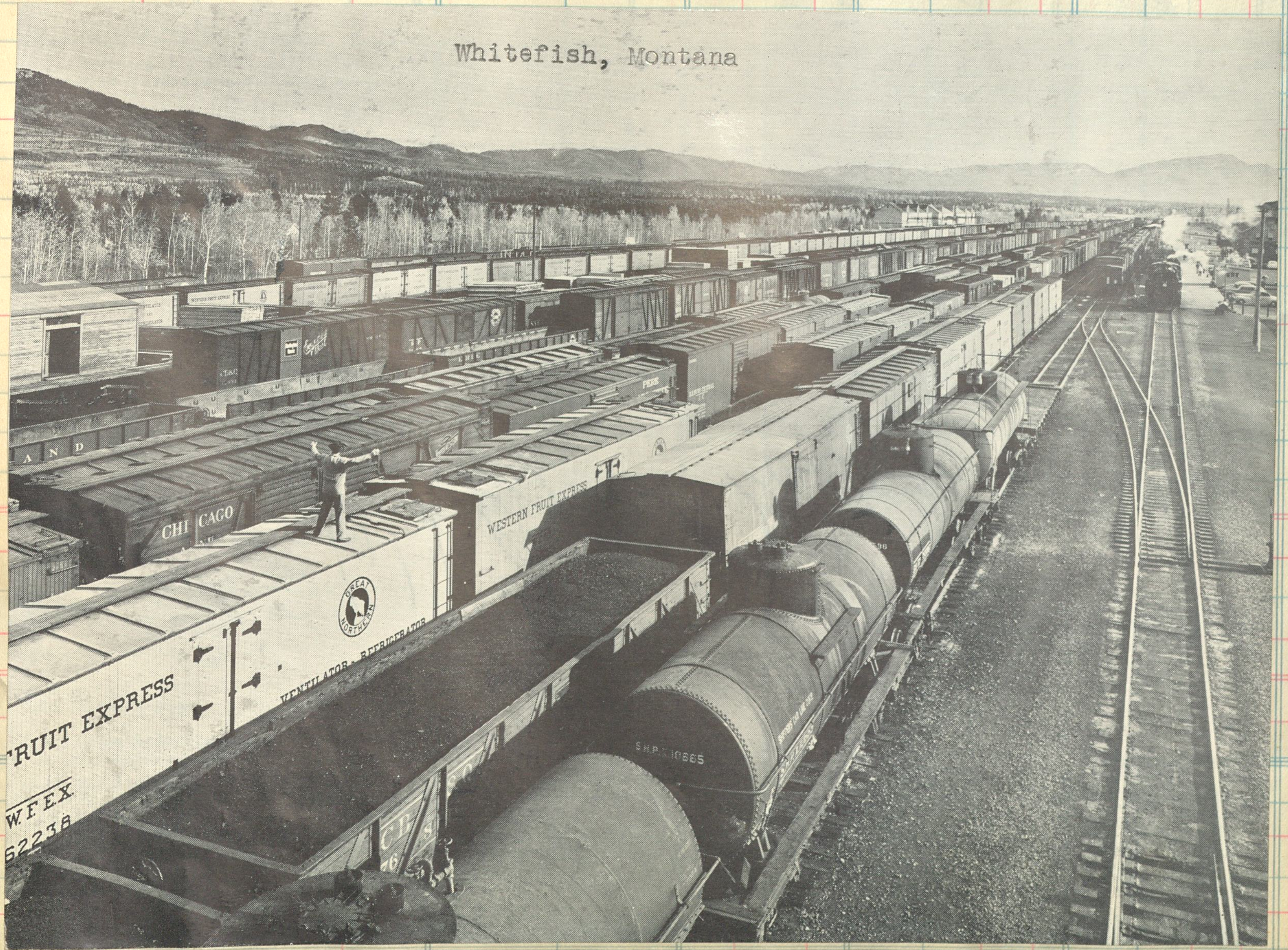


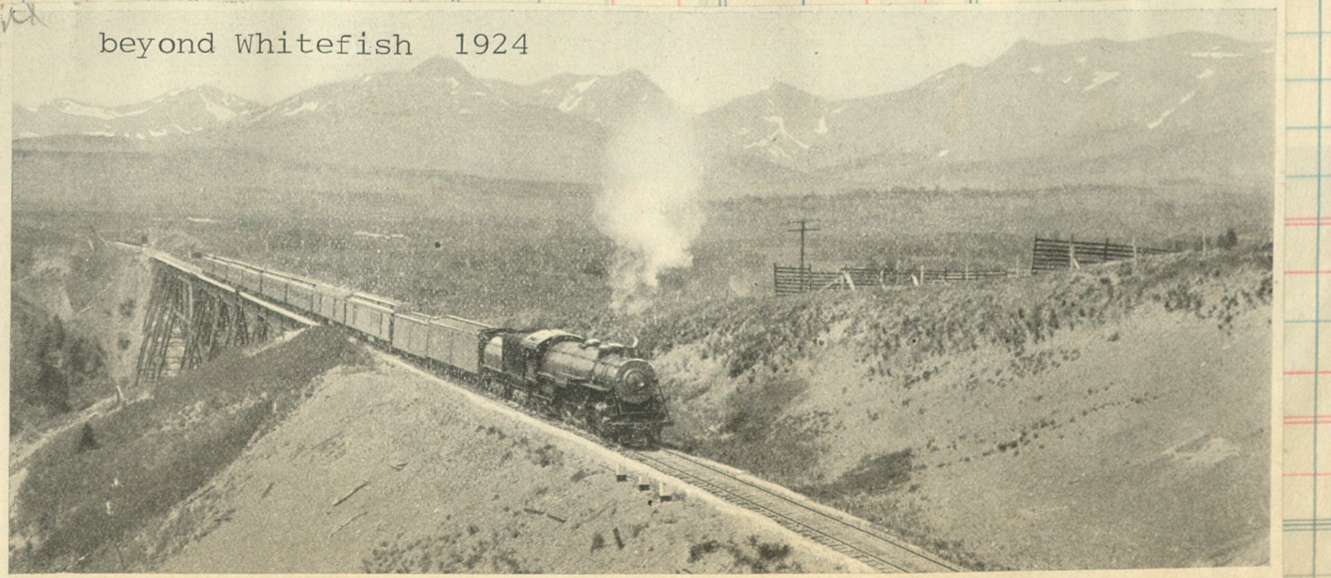
1926

One of 250 New Great Northern 50-ft. All-Steel Flat Cars Designed for the Shipment of Long Timbers from the West


4-6-0 #1028 class E-14
Baldwin 1909 c/n 33941
Reblt 1926 to 4-6-2
#1367 at Dale St Shops

**TRAIN #27** the famed Fast Mail of the Great Northern, is shown at the division point of Troy, Montana with ten wheeler No. 1028 on the point in the summer of 1914, taking on water after coaling at the huge dock in the background. The engineer and a locomotive inspector are oiling around and examining the running gear, while car inspectors starting at the first mail storage car behind the engine, work their way back to the last car tapping wheels and running gear with their hammers, listening for an off key metallic thud which would indicate a metal fracture not visible to the naked eye. In the Railway Post Office car, in the middle of the train, the mail is sorted to be ready for morning delivery from post offices along the way. The only road, of the three northwest transcontinentals to hold a government contract for delivery of mail from St. Paul to Spokane and Seattle, the Great Northern's Fast Mail held the record, for many years, for the fastest long distance run in the world. Many of the GN passenger engines were designed with the demanding schedule of #27 in mind. (Claude Witt)

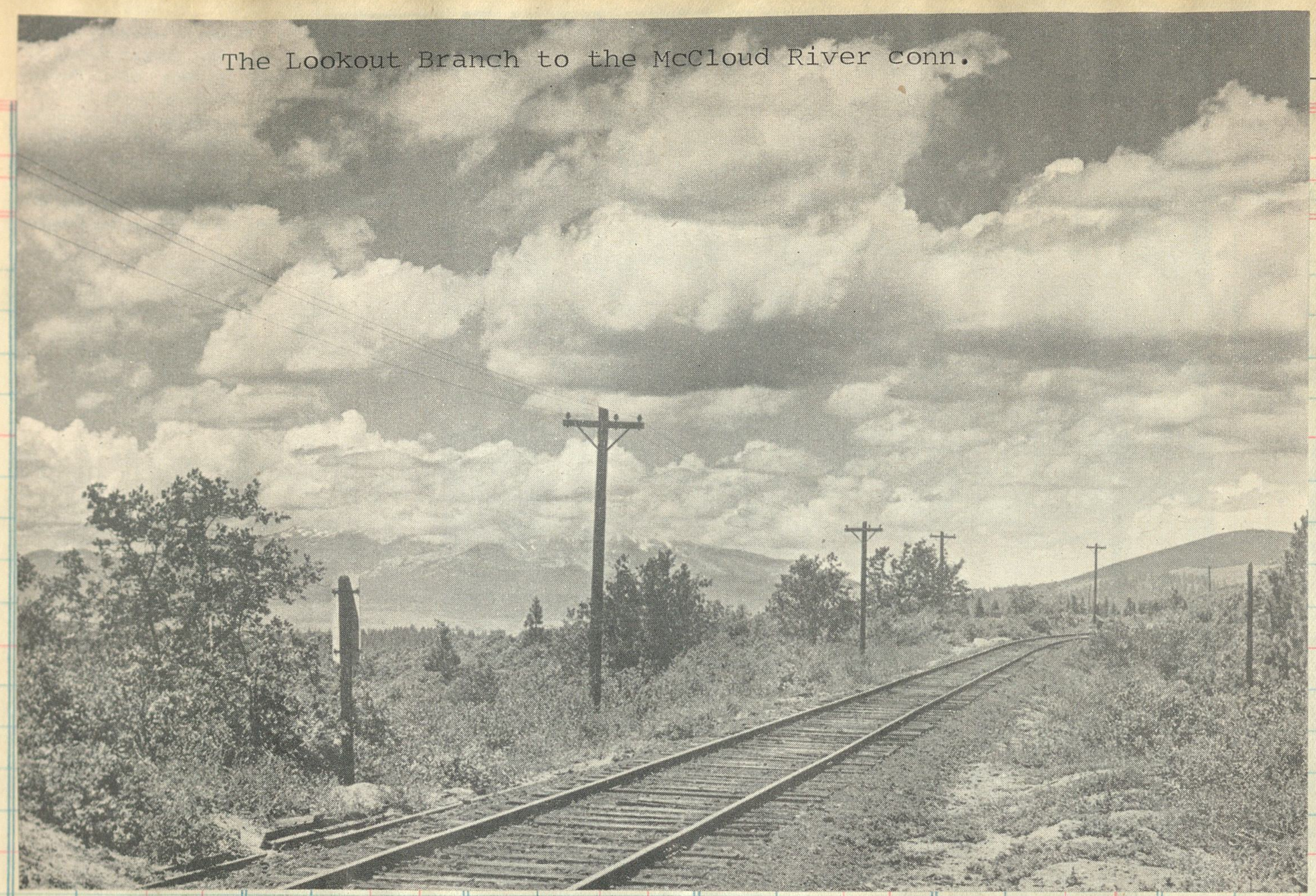

Whitefish, Montana

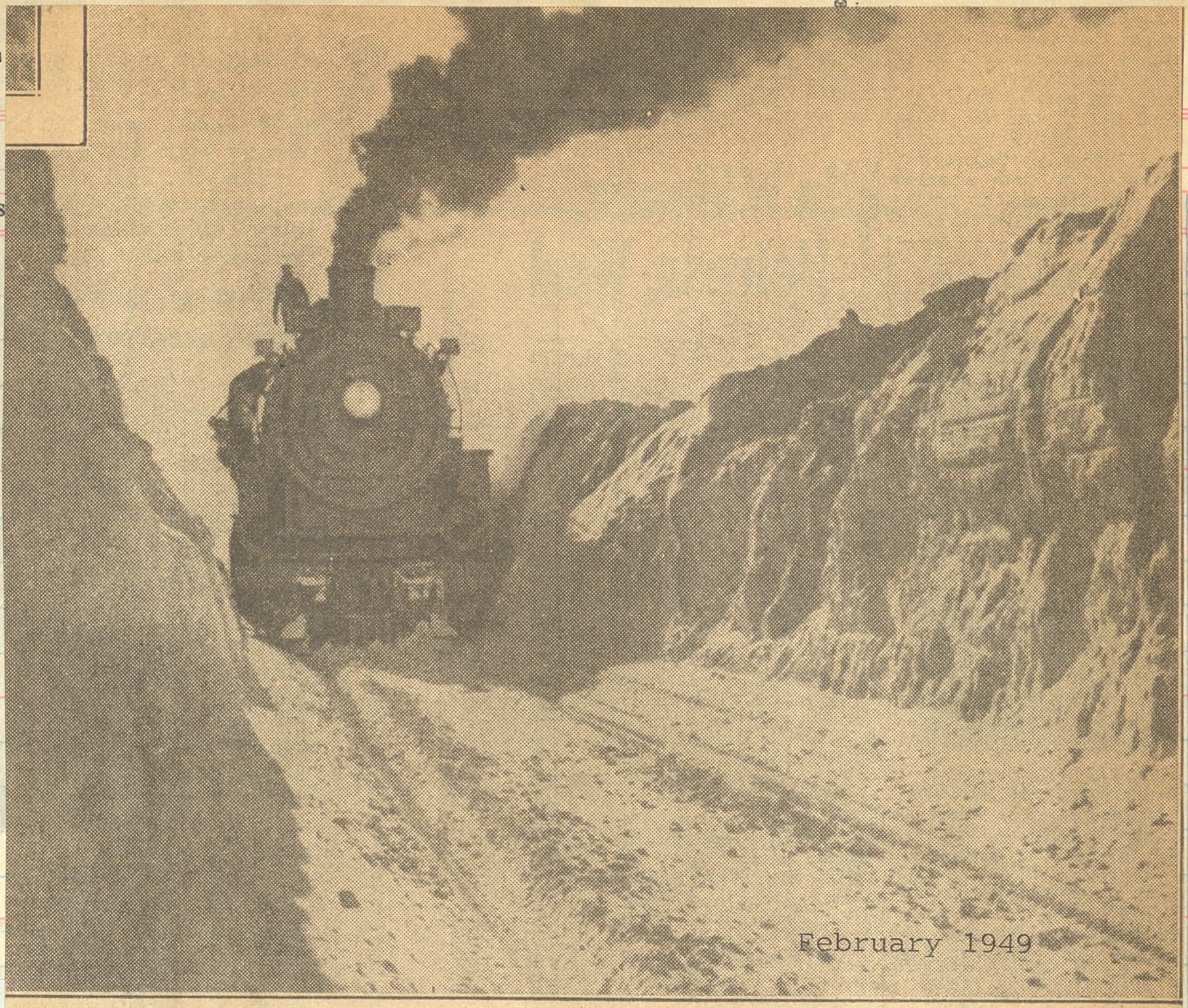

beyond Whitefish 1924

A BALDWIN MOUNTAIN TYPE LOCOMOTIVE ON THE GREAT NORTHERN

ST Amount Clos. No. S Sold Amount

The Lookout Branch to the McCloud River conn.



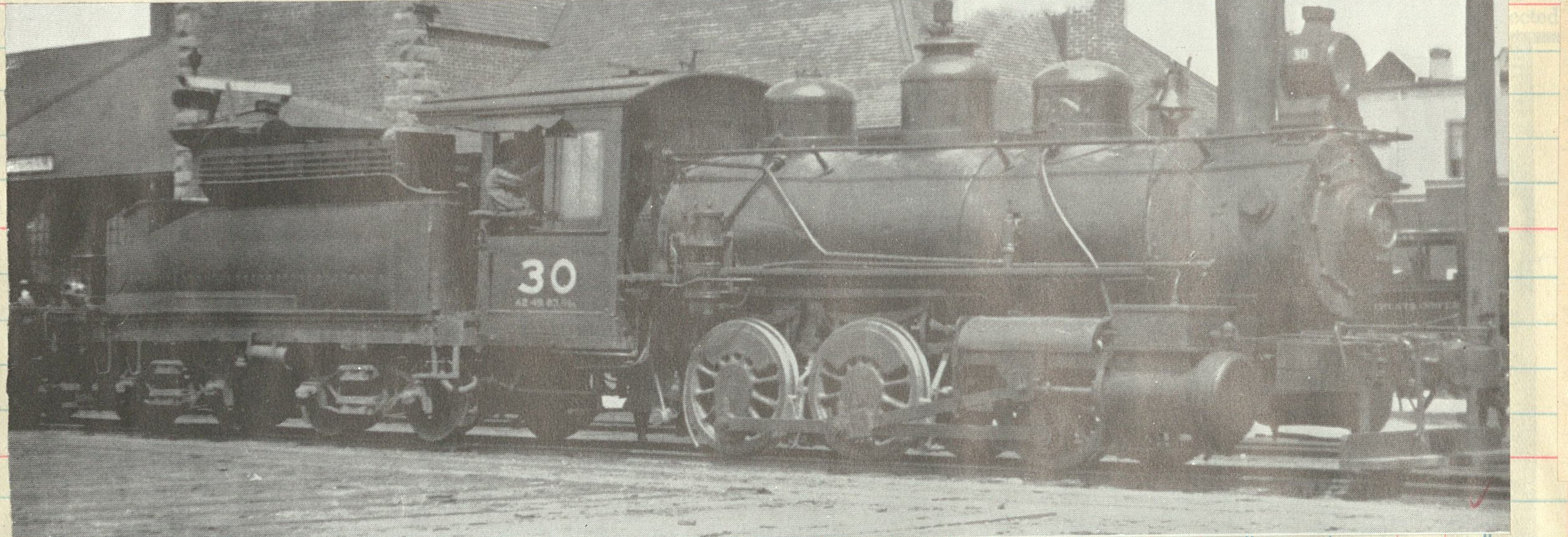


February 1949

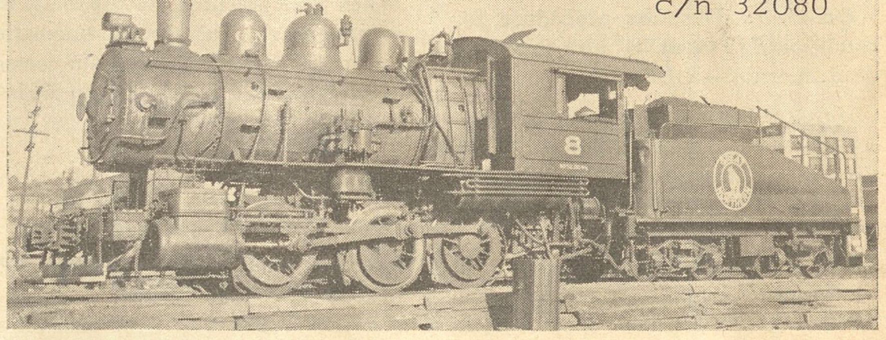
(Associated Press Wirefoto)

**Track Winner.** Squeezing through mountainous piles of snow lining the tracks, this train moves along a spur leading to coal mine near Hazen, N. D. Plow trains opened rails after snowstorms, which have plagued West all Winter. —*Story p. 21*

Built by Hinkley in 1888 (c/n 1765) for StPM&M, #232, to G.N. 232. Sold to Seattle & Montana, #232, in 1892. Returned to G.N. as #30 in 1899. In 1915 was sold to So. McCoy Logging Co.



2-11 Baldwin 1907
c/n 32080

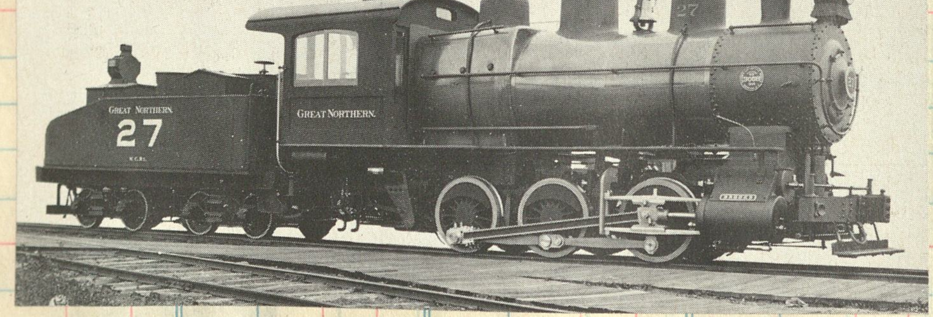


Albert Farrow

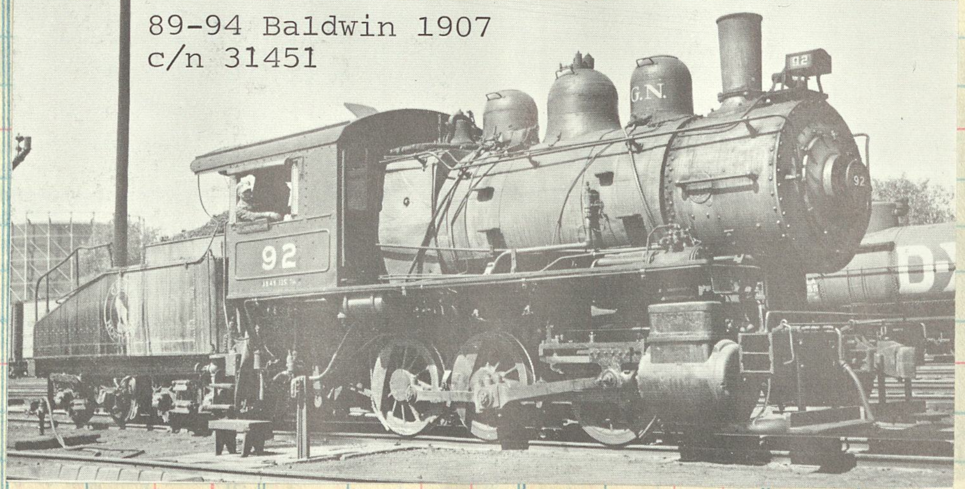
GREAT NORTHERN'S ENGINE 8 LEASED OUT AT SEATTLE, WASH.

This engine, which is leased by the King St. Terminal Co., of Seattle, is used to switch coaches at that station.

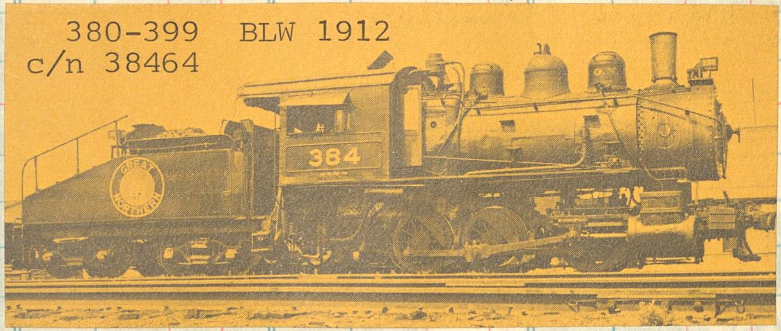
Blt for Montana Central by Brooks 1898
to GN 86, 96
c/n 3056


GREAT NORTHERN
27
GREAT NORTHERN

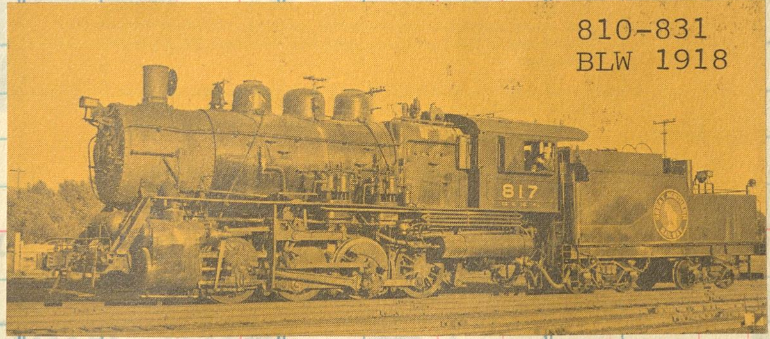
89-94 Baldwin 1907
c/n 31451



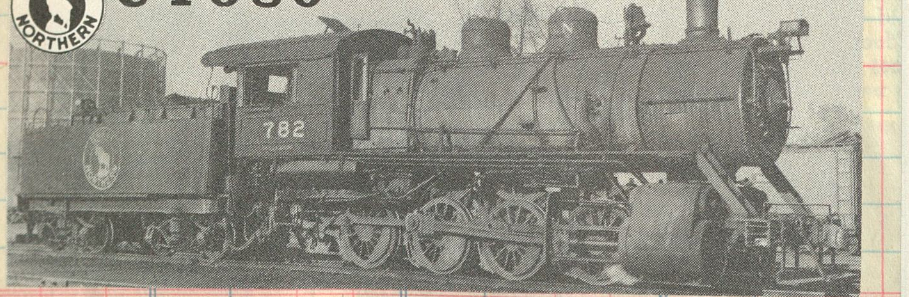
380-399 BLW 1912
c/n 38464



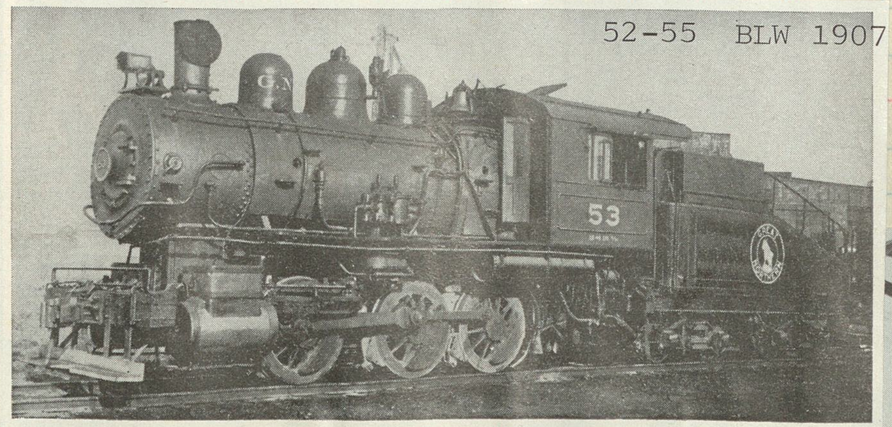
810-831
BLW 1918

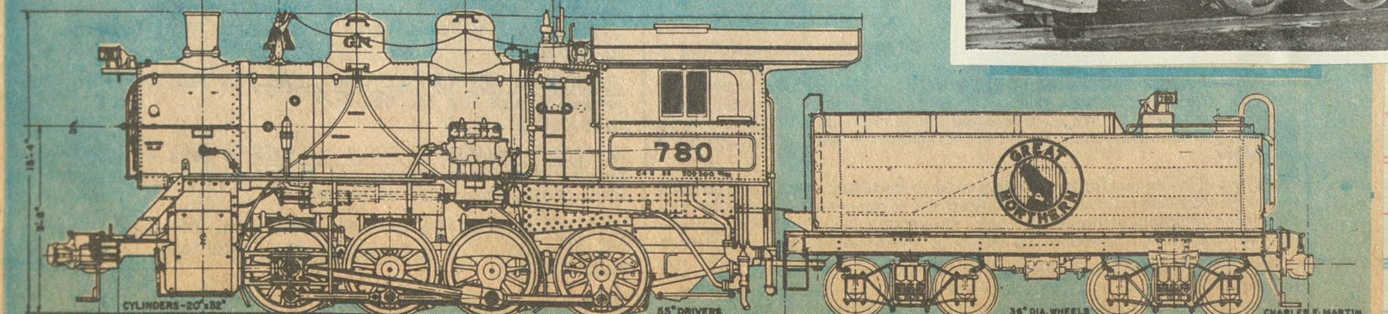


**C-4 0-8-0**



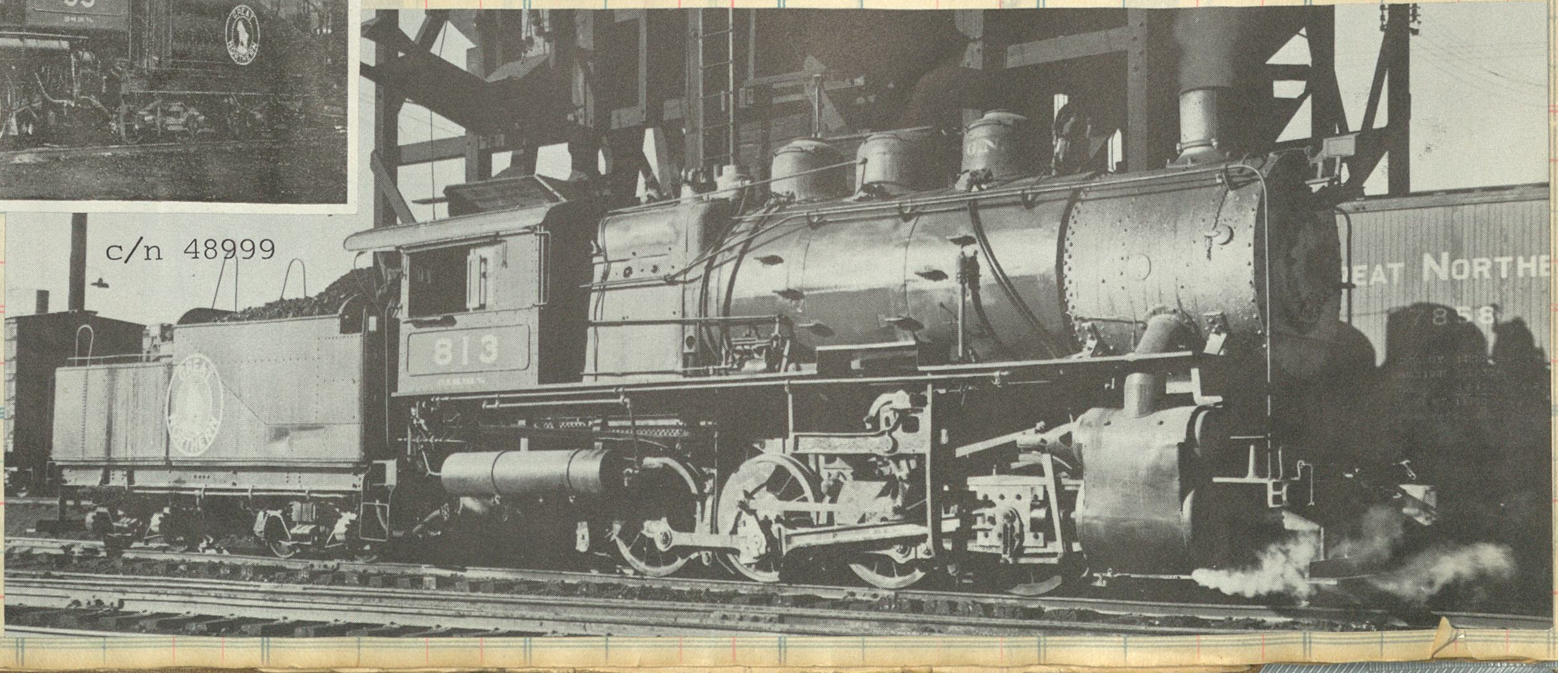
52-55 BLW 1907




47·375"
48·125"
66·375"
54·875"
GN
780
GREAT NORTHERN
15'-4"
9'-8"
CYLINDERS-20"x32"
12" PISTON VALVES
55" DRIVERS
36" DIA. WHEELS
CHARLES F. MARTIN
MMR © 1976
12"
4'-1·250"
4'-6"
5'-2"
5'-2"
5'-8"
9'-0"
34'-7·250"
76"
67"
161"
67"
81·5"
318·5"

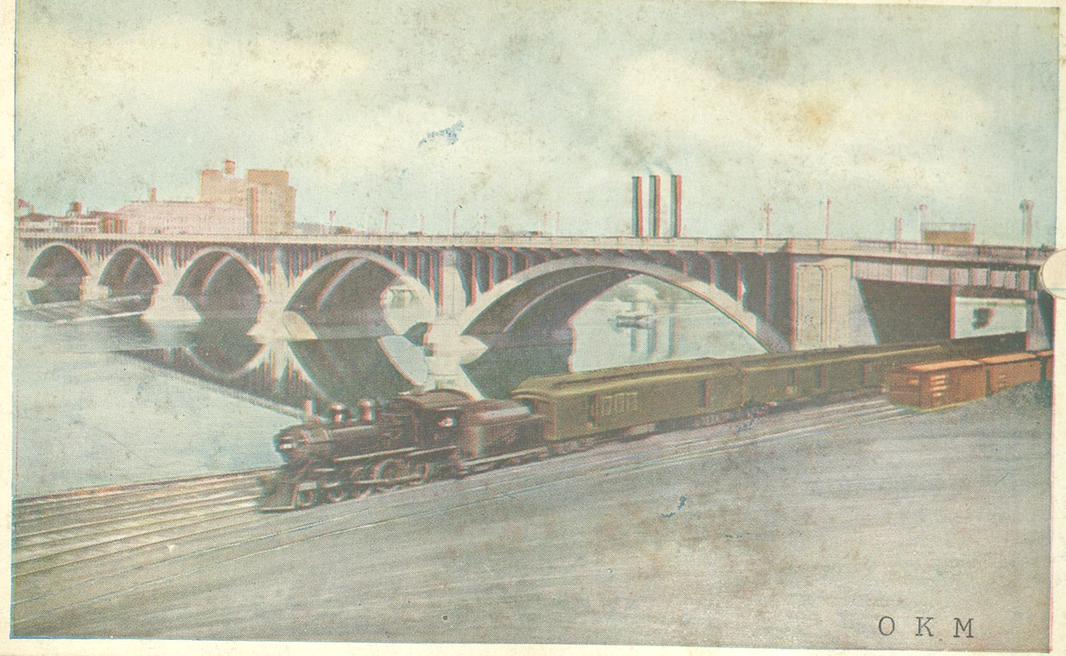
The 782 and 780 rebuilt from F-8 2-8-0's
but data details unconfirmed

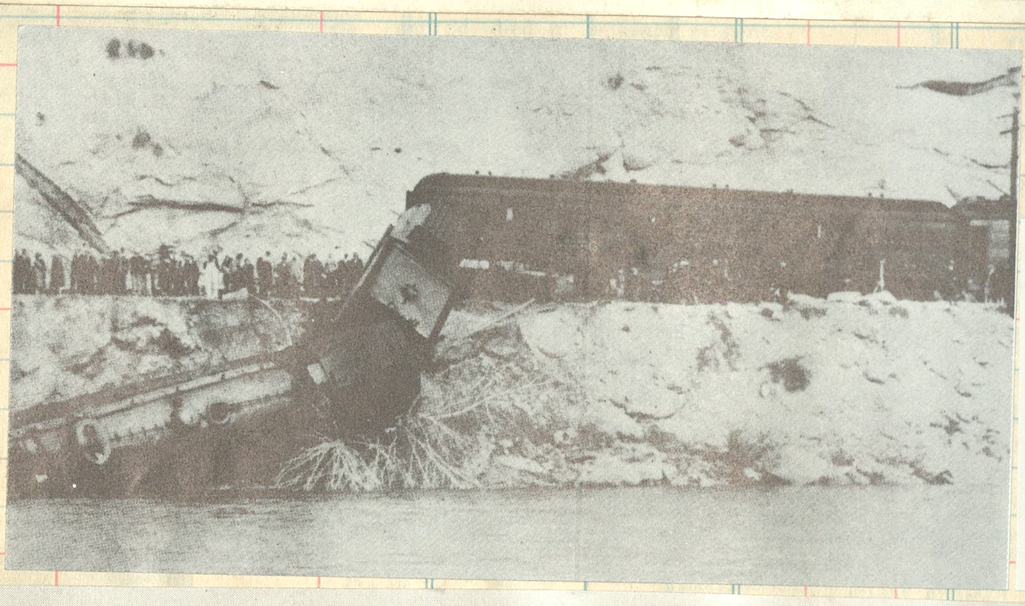
c/n 48999


813
GREAT NORTHE

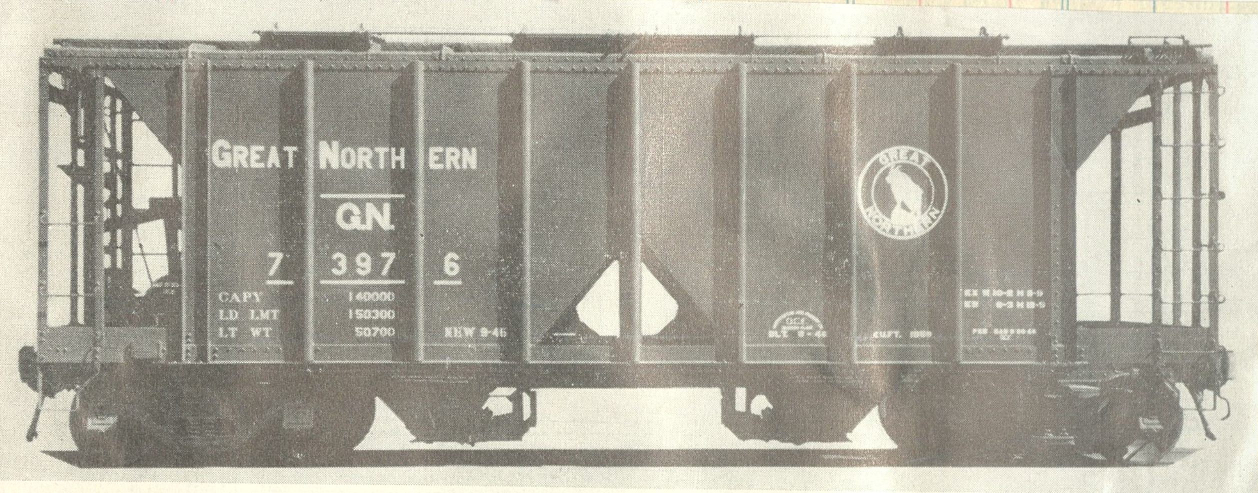
tral System

B—22 NEW THIRD AVE. BRIDGE, MINNEAPOLIS, MINN.

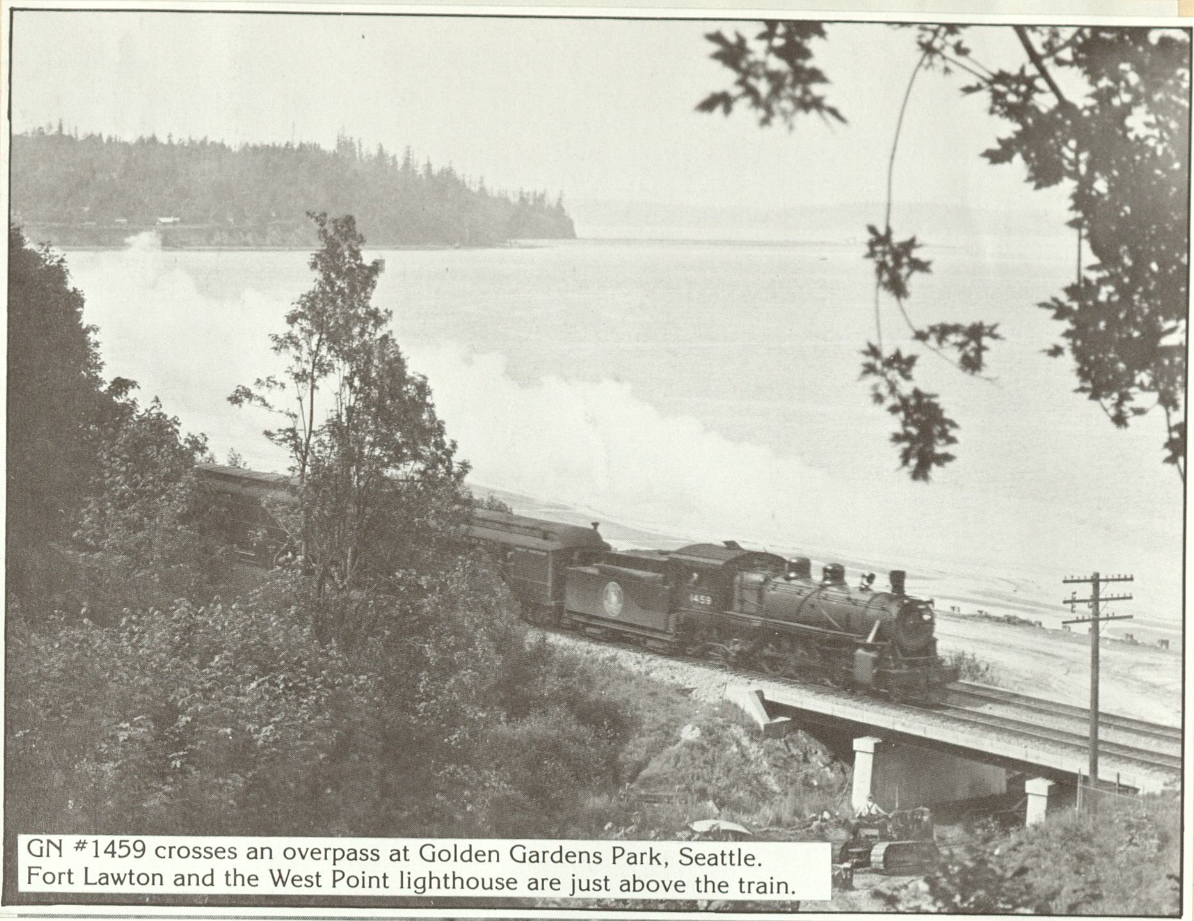




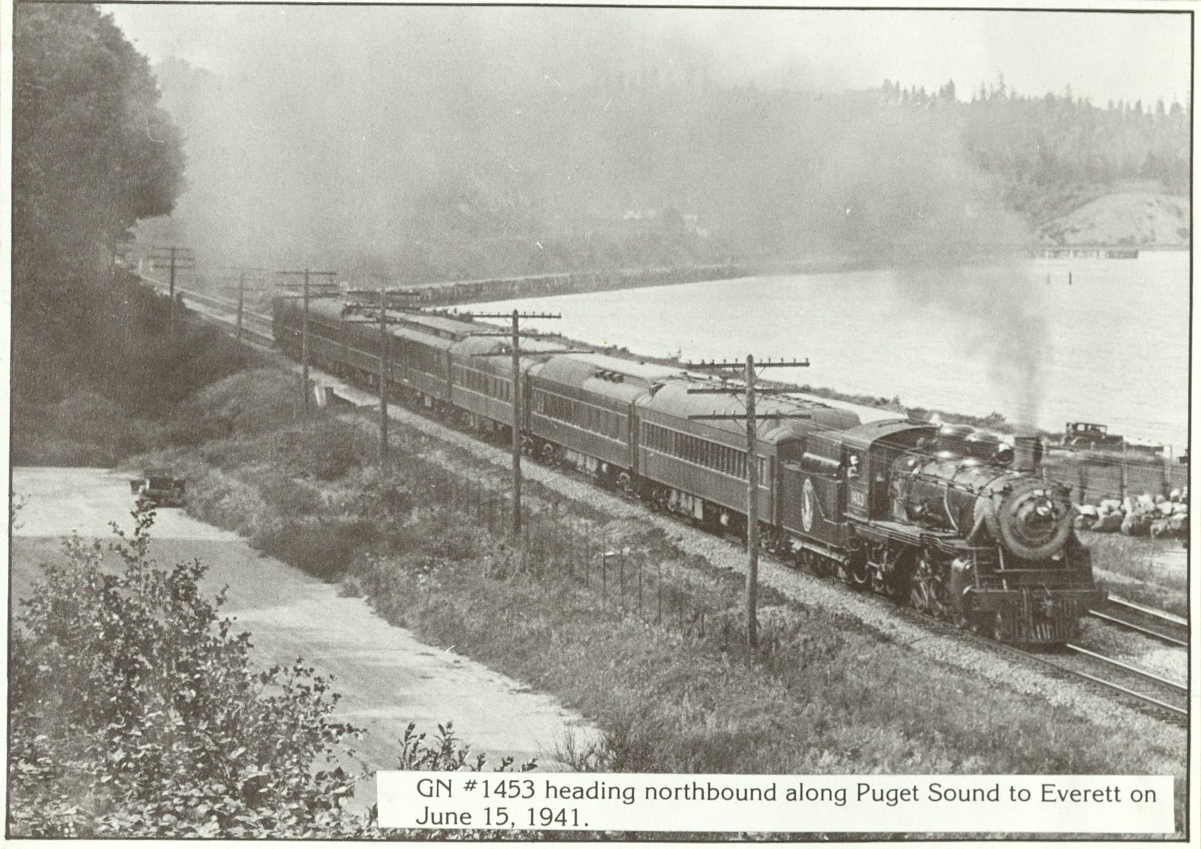
**ON MARCH 11, 1928,** along the Wenatchee River near Peshastin, Washington a P-2 class Mountain on the head end of the westbound Oriental Limited hit a rock resulting in the engine's derailment. Fortunately, because the train was running slowly the only damage other than to the engine was the lifting off of the baggage/mailcar from its front truck bolster. It was some time however, before the big Mountain was put back on the rails and pulled back to Wenatchee for repairs. (Lee Pickett)



**Great Northern 70-ton welded covered hopper car. Builder, American Car and Foundry Co.**
Light weight 50,700 lb.; load limit 150,300 lb.; capacity 1,958 cu. ft.; inside length 29 ft. 3 in.; width 9 ft. 5½ in.; 8 hatches 36 in. by 36 in. 4 hopper openings 13 in. by 24 in.



GN #1459 crosses an overpass at Golden Gardens Park, Seattle. Fort Lawton and the West Point lighthouse are just above the train.

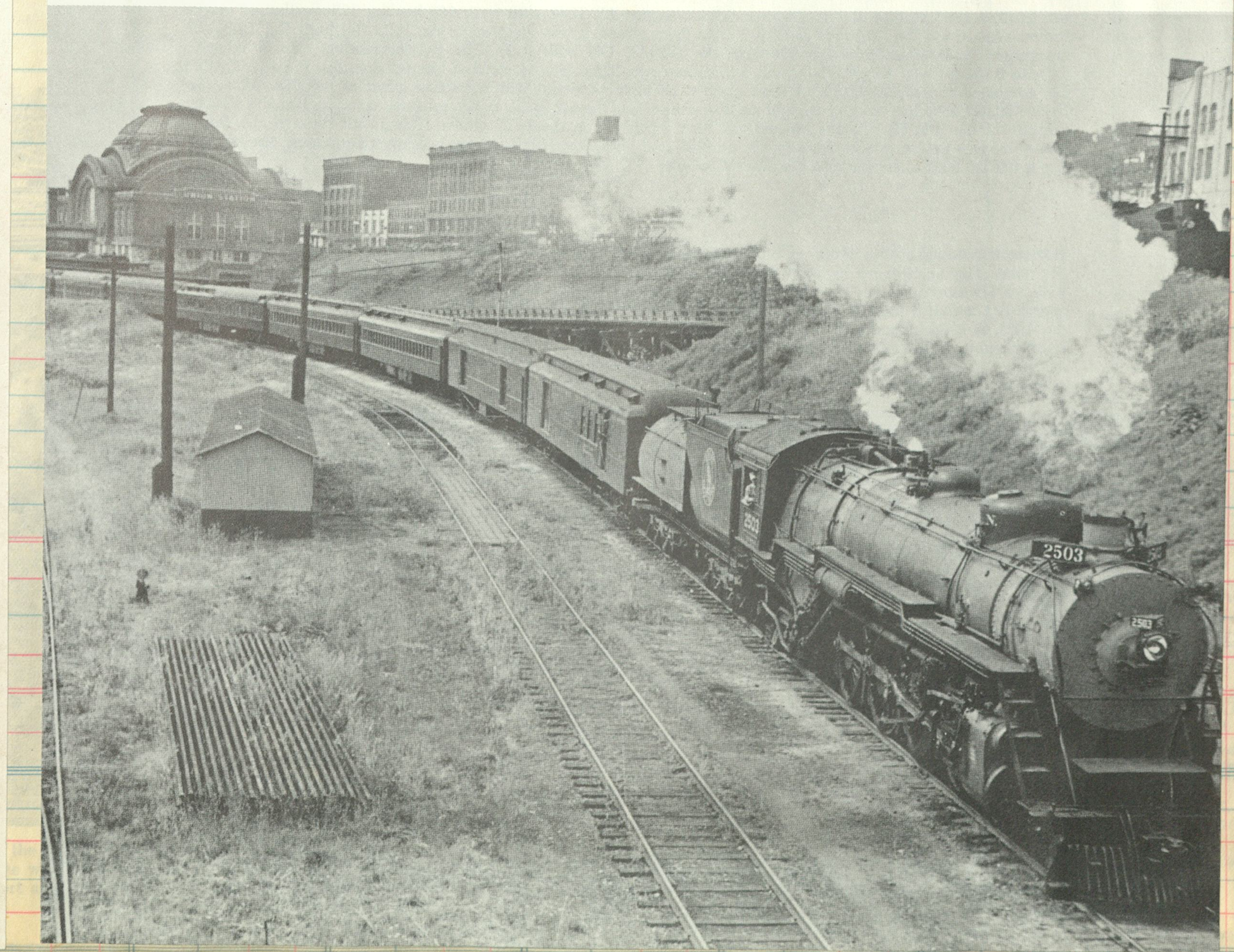


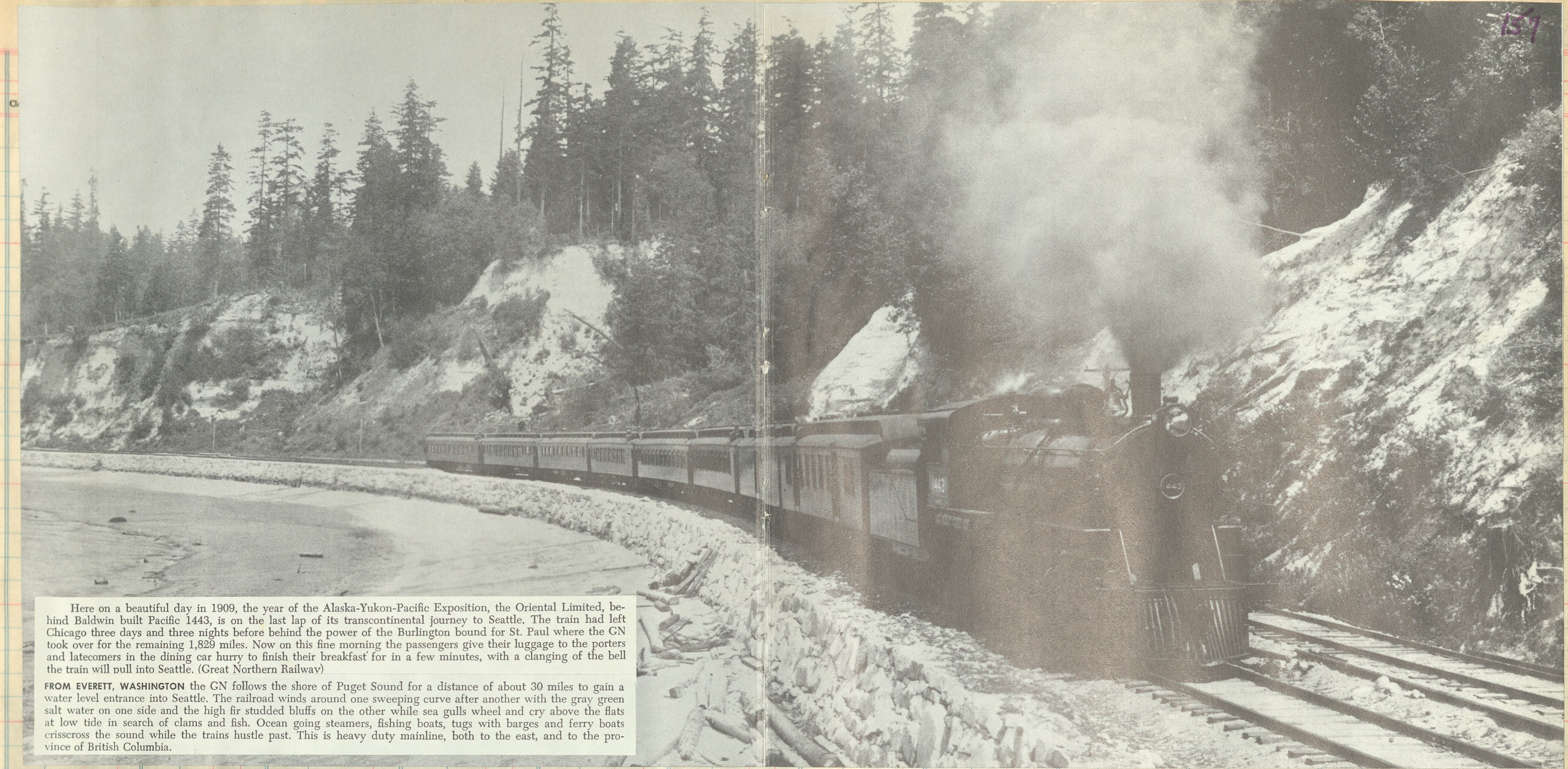
GN #1453 heading northbound along Puget Sound to Everett on June 15, 1941.

James A. Turner

A Seattle-Portland pool train nears the southern terminal

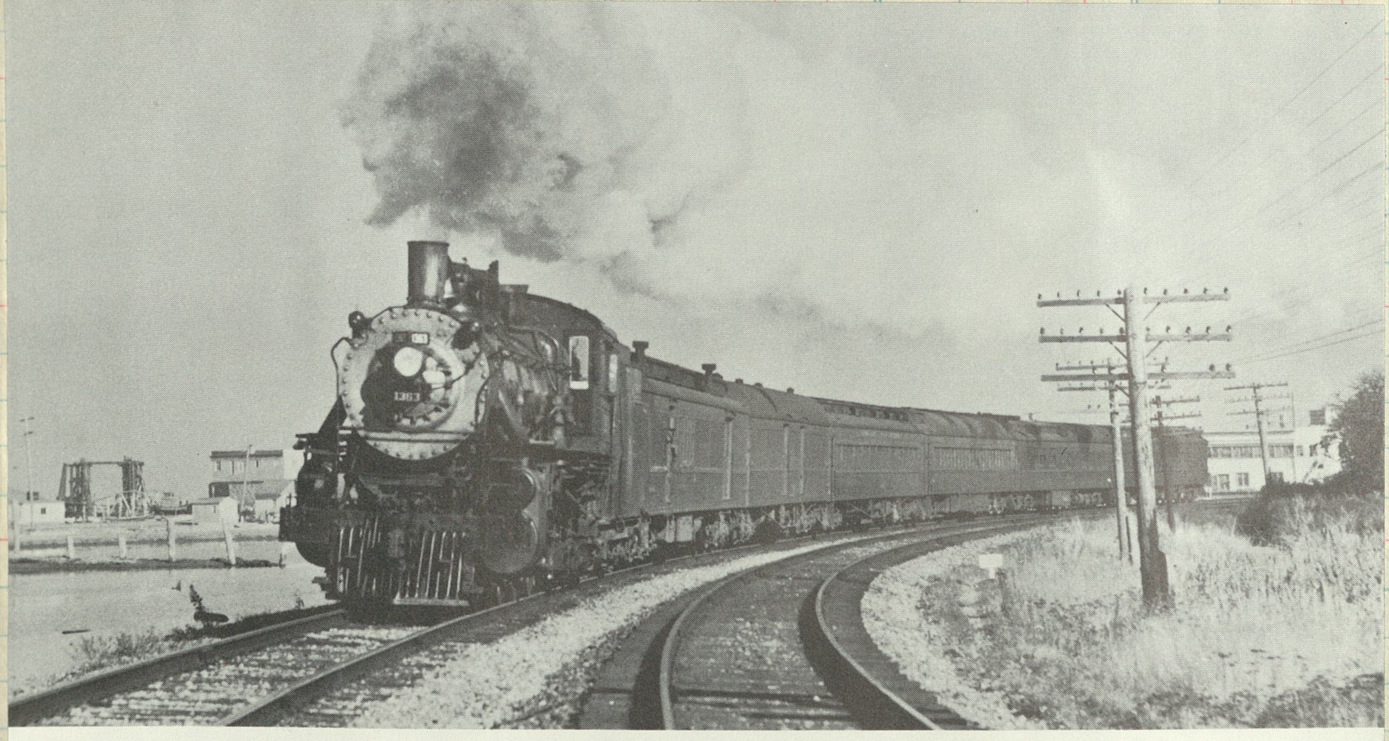
**TRAIN #408** leaving Union Station at Tacoma, Washington is heading for Portland, Oregon over the joint NP-UP-GN mainline that follows Puget Sound nearly to Olympia, Washington. Just visible through the smoke is an NP engine on the approach to the old "Prairie Line" out through South Tacoma. (Stuart B. Hertz)



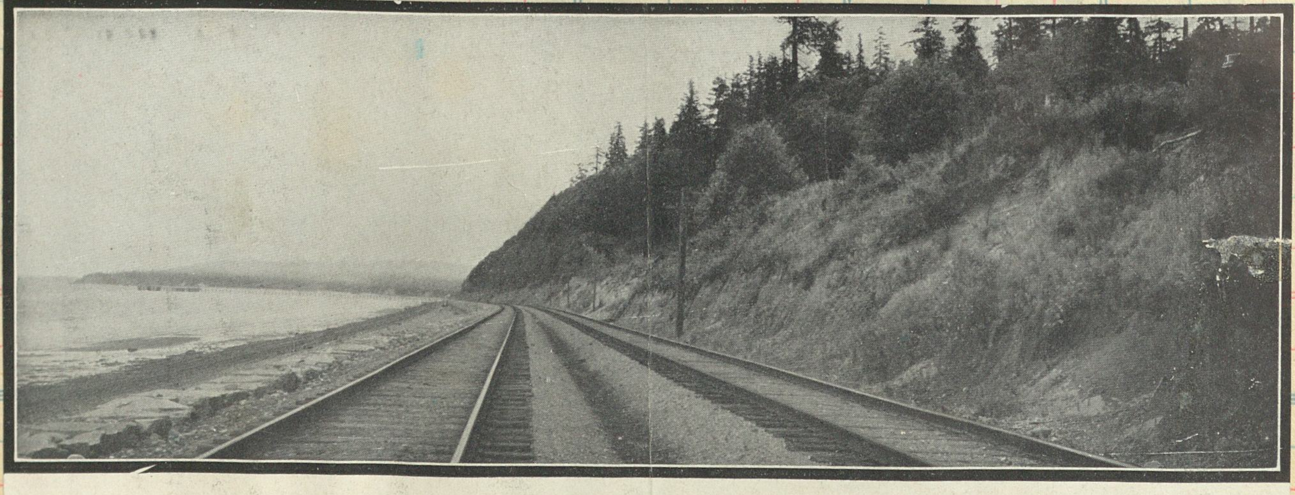


Here on a beautiful day in 1909, the year of the Alaska-Yukon-Pacific Exposition, the Oriental Limited, behind Baldwin built Pacific 1443, is on the last lap of its transcontinental journey to Seattle. The train had left Chicago three days and three nights before behind the power of the Burlington bound for St. Paul where the GN took over for the remaining 1,829 miles. Now on this fine morning the passengers give their luggage to the porters and latecomers in the dining car hurry to finish their breakfast for in a few minutes, with a clanging of the bell the train will pull into Seattle. (Great Northern Railway)

**FROM EVERETT, WASHINGTON** the GN follows the shore of Puget Sound for a distance of about 30 miles to gain a water level entrance into Seattle. The railroad winds around one sweeping curve after another with the gray green salt water on one side and the high fir studded bluffs on the other while sea gulls wheel and cry above the flats at low tide in search of clams and fish. Ocean going steamers, fishing boats, tugs with barges and ferry boats crisscross the sound while the trains hustle past. This is heavy duty mainline, both to the east, and to the province of British Columbia.

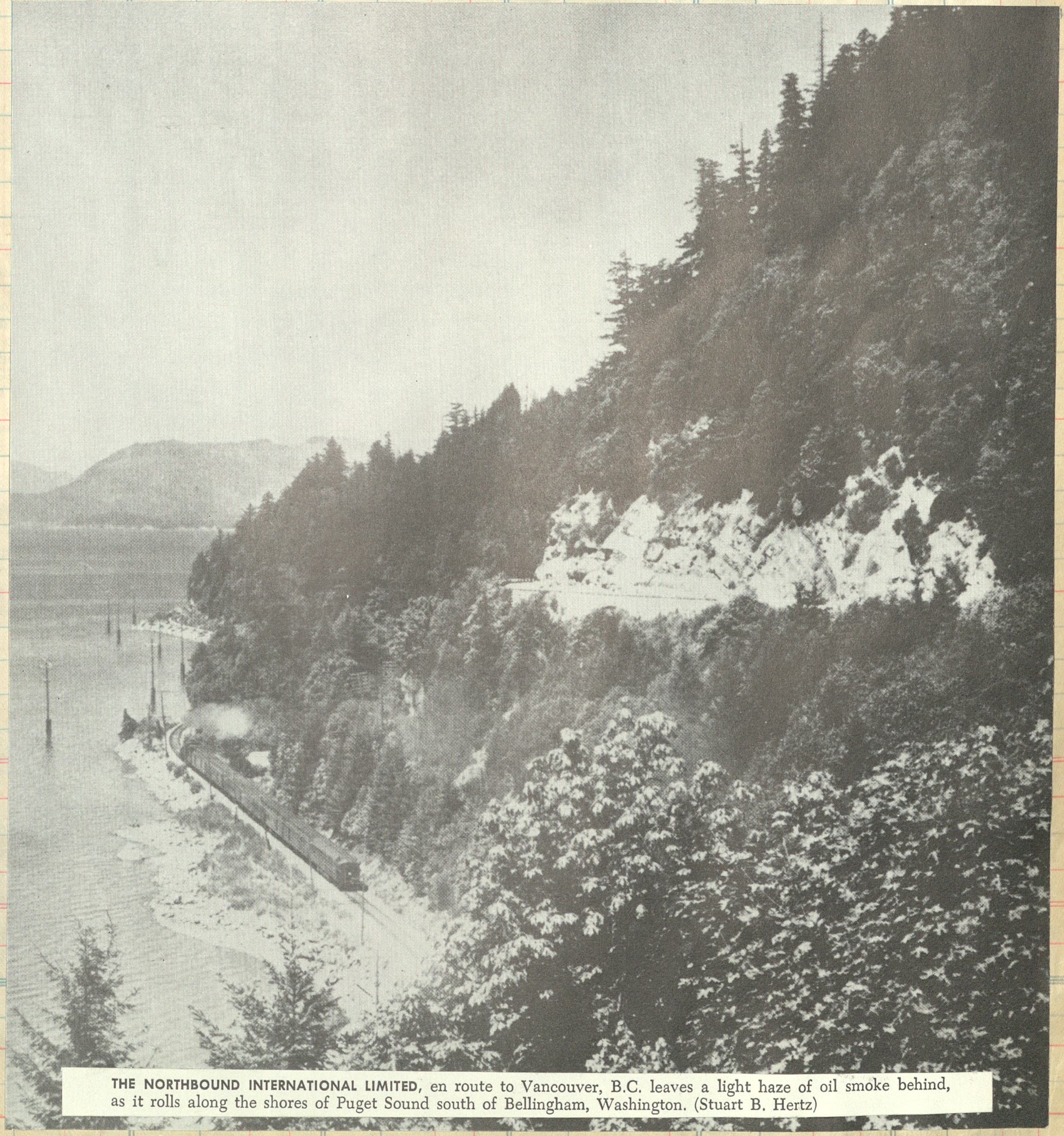


**ON A MAGNIFICENT SUMMER MORNING** in the early 1940's the southbound "Owl", overnight train from Vancouver, B.C. sprints along the shore of Puget Sound en route to Seattle. Due to arrive at 7 A.M. the train is running late because of heavy traffic on the north end, and Pacific No. 1363 is "picking them up and laying them down" in a race against time. (Stuart B. Hertz)



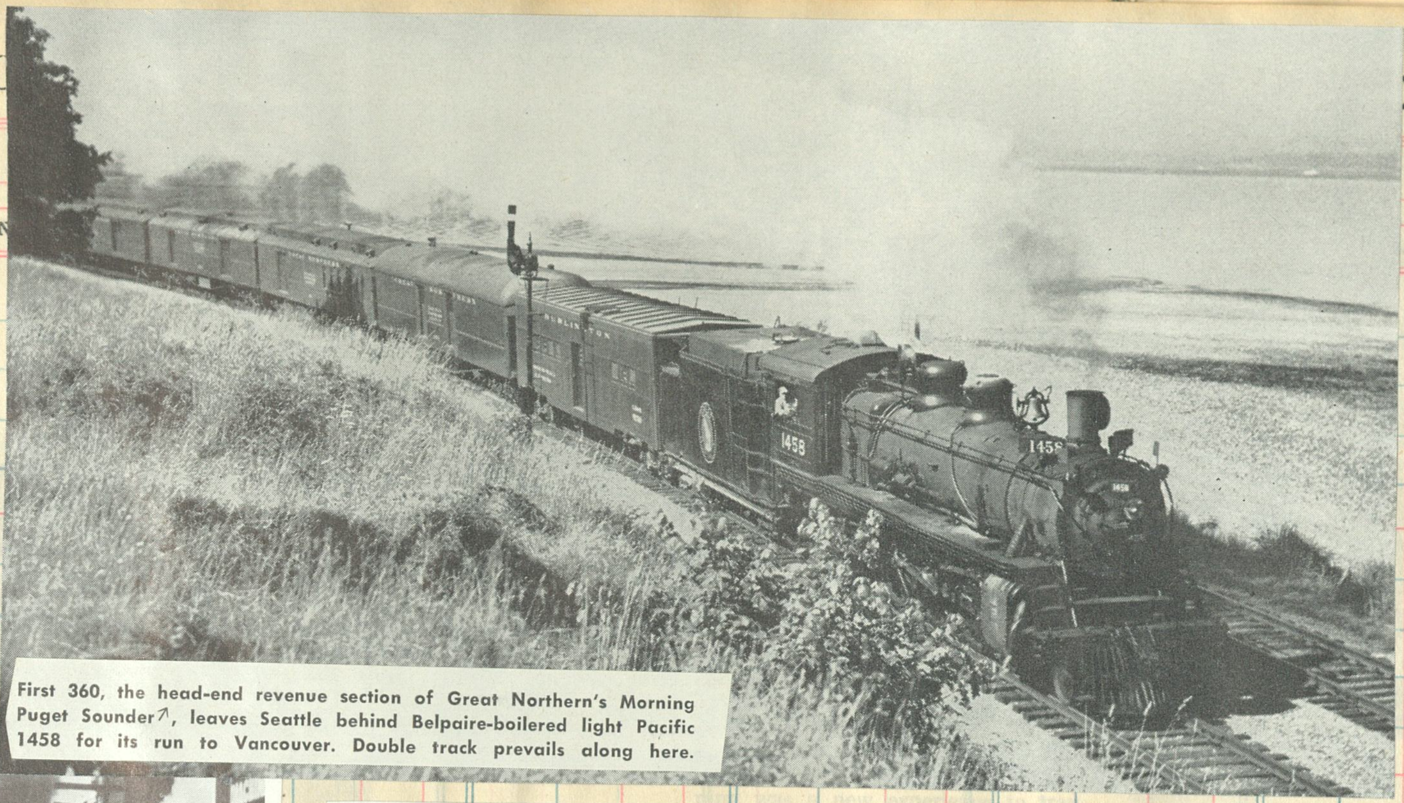
Double Track Along Puget Sound

OKM

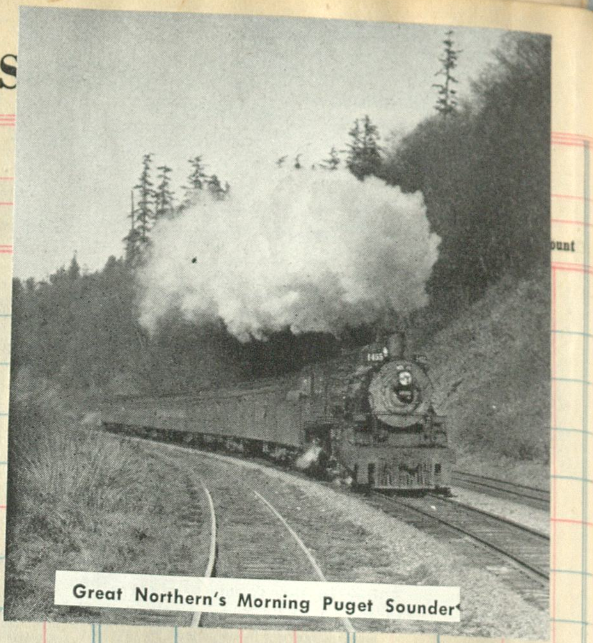


**THE NORTHBOUND INTERNATIONAL LIMITED**, en route to Vancouver, B.C. leaves a light haze of oil smoke behind, as it rolls along the shores of Puget Sound south of Bellingham, Washington. (Stuart B. Hertz)

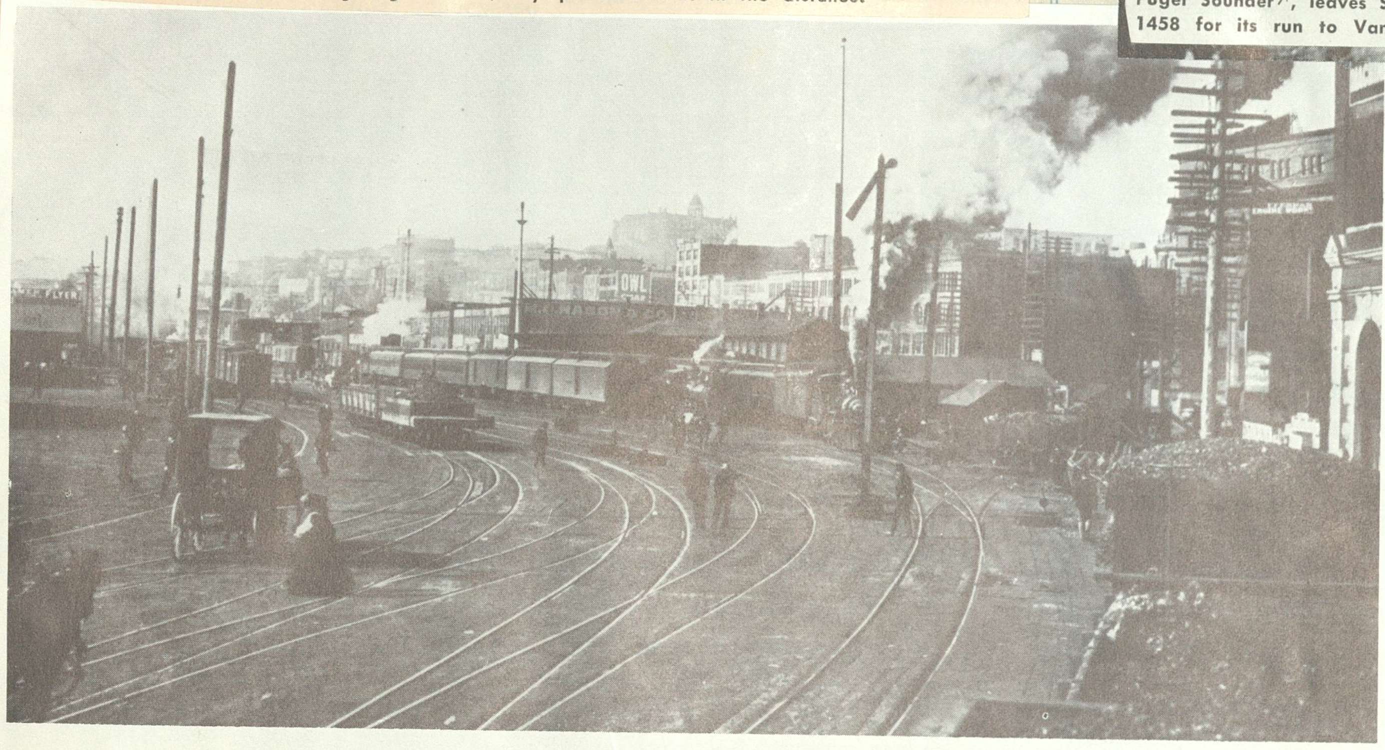
SCENERY ON GREAT NORTHERN ROUTE
Train along Puget Sound, Olympic Mountains in the distance.



First 360, the head-end revenue section of Great Northern's Morning Puget Sounder↗, leaves Seattle behind Belpaire-boilered light Pacific 1458 for its run to Vancouver. Double track prevails along here.

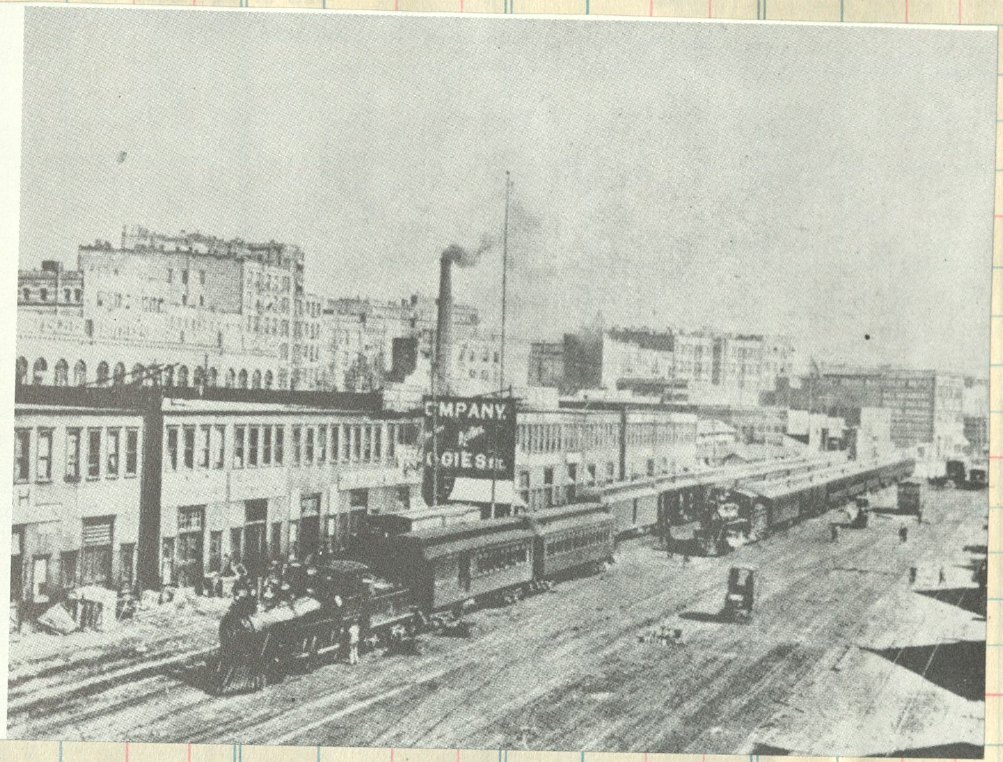


Great Northern's Morning Puget Sounder

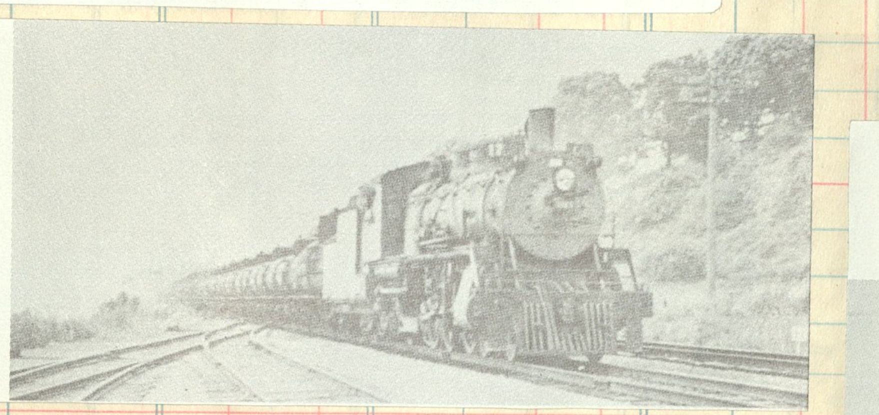


**SALT WATER TERMINAL.** Seattle's railroad yards looked like this shortly after Jim Hill's trains began to operate into the Puget Sound port. (Courtesy of Joe Williamson)

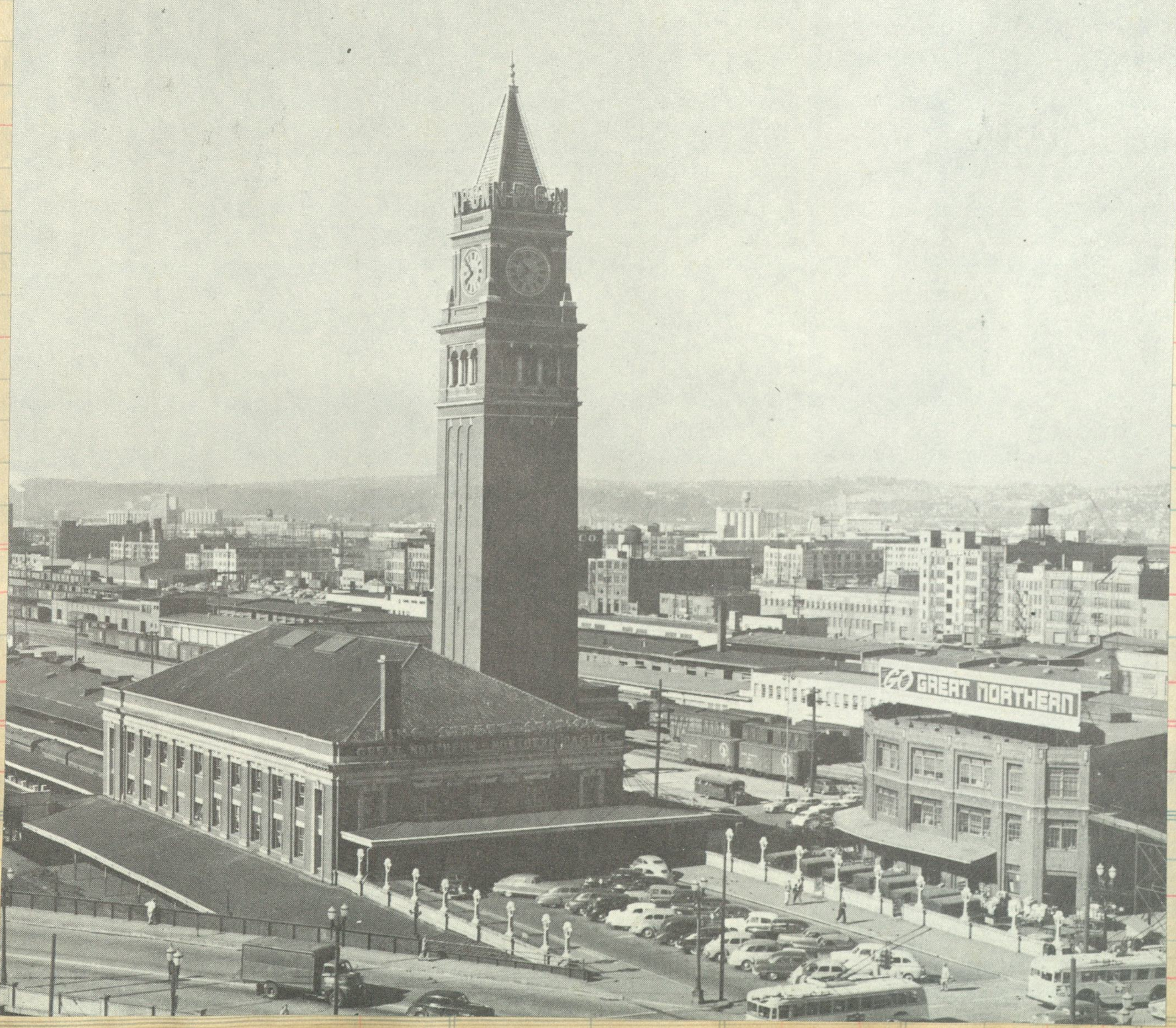
**PRIOR TO 1906,** when King Street Station was completed, the Great Northern station was located between Marion and Columbia streets along the waterfront on—aptly named—Railroad Avenue. Largely at the insistence of James J. Hill, who realized that this fine deep water frontage would always be constricted by the terminal and yards of the railroad in this location, the railroad terminal was moved away from the waterfront, further south, about a mile beyond the main business section of Seattle. Today a few of the buildings visible in this 1896 photo still remain, including the tall steam power plant smokestack. The mainline tracks are now in a two track tunnel running generally under 4th Avenue, and almost directly over the old track location there is a tremendous double deck highway viaduct running along the length of the waterfront, while parallel switching leads below serve the docks and warehouses. (Great Northern Railway)



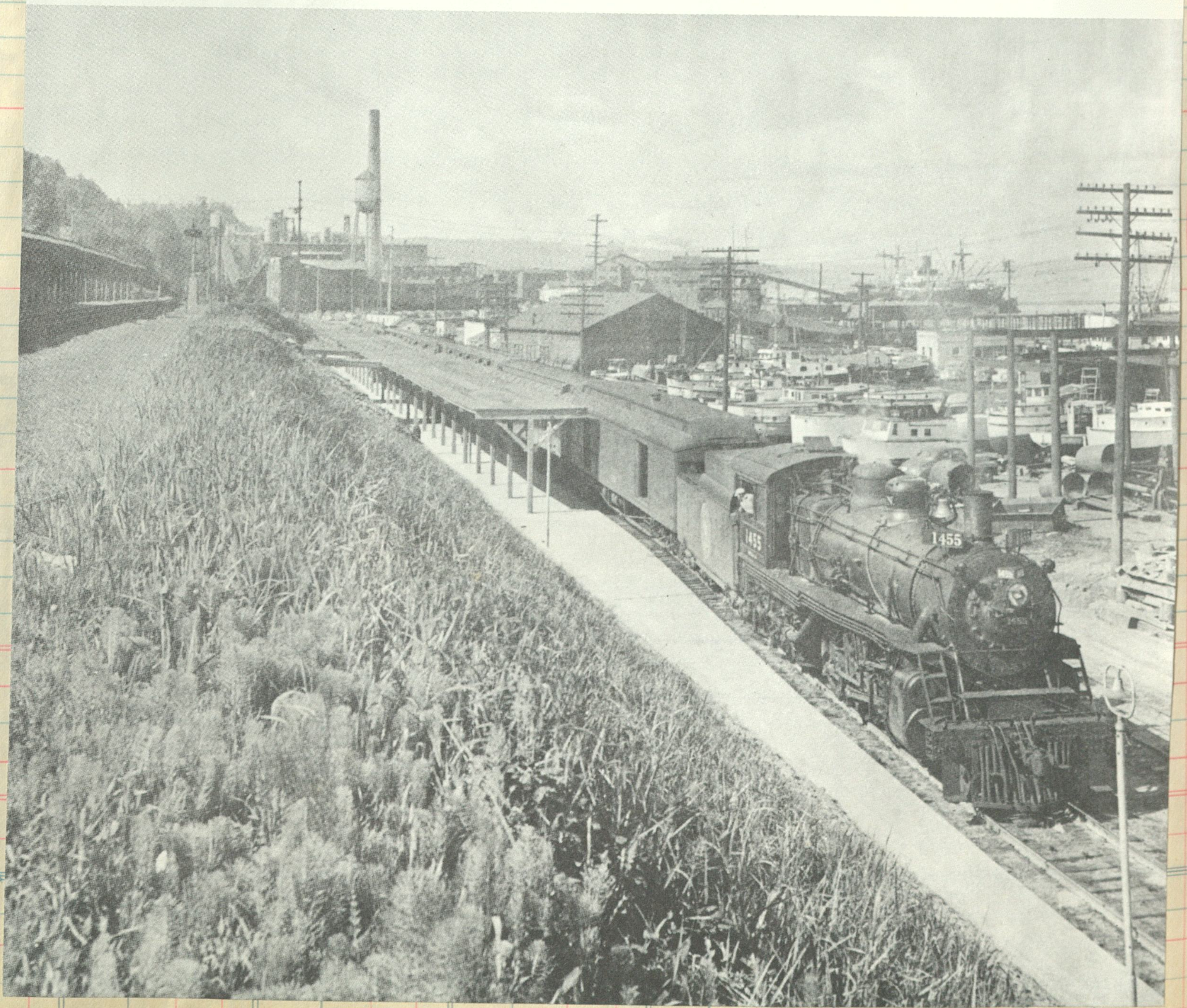
**CLASS H-6 PACIFIC** No. 1714, running with a clear stack, peddles along the double mainline bordering Puget Sound with a solid consist of empty oil tankers en route to the big oil facility at Richmond Beach, just north of Seattle. The Pacific is well suited to this freight assignment with its 69″ drivers and well balanced running gear. Versatile, modernized, free steaming and easy riding, they were popular with the crews, and on the nearly level track from Seattle north to Vancouver, B.C., handled nearly every type of train from the Internationals to freights and work train extras. (Walt Mendenhall)



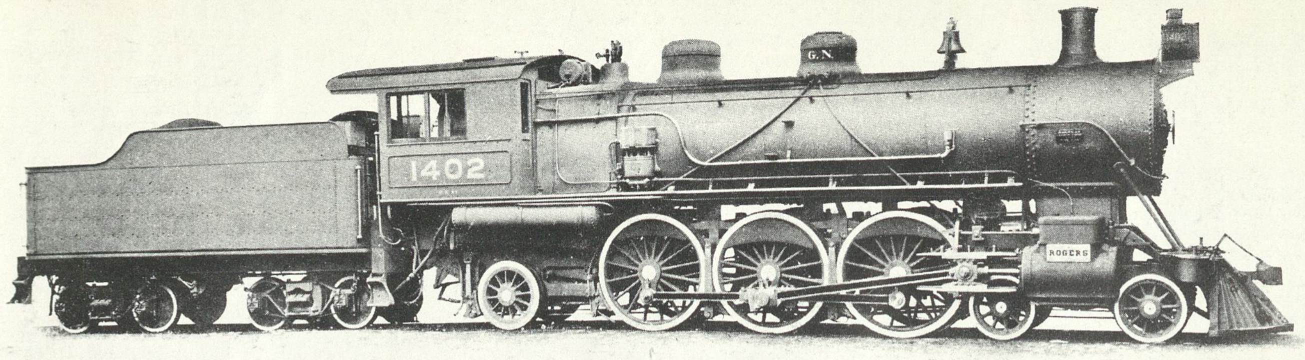
King Street Station, Seattle, GN-NP, completed May 9, 1906



**AT EVERETT, WASHINGTON** the hogger of the northbound International Limited looks back along the length of the train for the conductor's highball. The lower platform is for the use of the north and southbound trains while the upper platform, alongside the station, serves the east west mainline. Just beyond the north end of the station the upper line turns and heads due east after passing through a tunnel under the business section of Everett. (Stuart B. Hertz)



Initial 4-6-2's for the G.N.

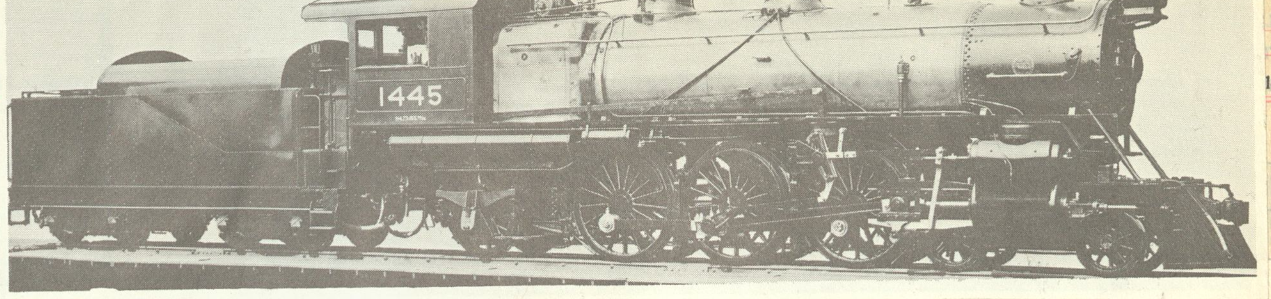


1400-1405 c/n 38896 Rogers 1905
Cyls 21x28 dvs 73" TF 30,190# Tender: 13T 7000 gals

PACIFIC TYPE PASSENGER LOCOMOTIVE

*Built for the Great Northern Railway*

1441-1460 Baldwin 1909 c/n 33332
class H-4



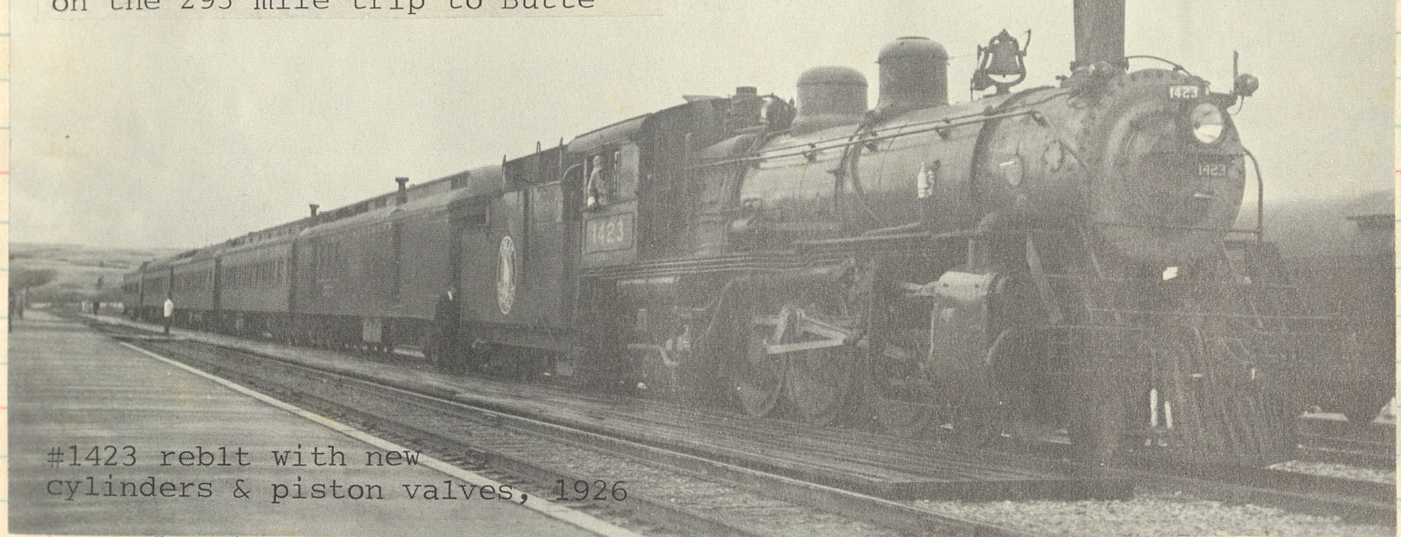
Pacific Type Locomotive, Class H-4, Built by The Baldwin Locomotive Works, 1909

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 23½″ x 30″ | Tubes, number 5½″, 32; 2¼″, 160 | | Wheel base, driving | 13′ 0″ | Weight, total engine | 235,750 lb |
| Drivers, diam. | 73″ | " length | 21′ 0″ | " " total engine | 33′ 9″ | " " " and tender | 384,000 lb. |
| Boiler, diam. | 72″ | Grate area | 53.3 sq. ft. | " " " " and tender | 66′ 7½″ | Tank capacity | 8000 U. S. gal. |
| Steam pressure | 185 lb. | Water heating surface | 3177 sq. ft. | Weight on drivers | 152,000 lb. | Fuel " | 13 tons |
| Firebox | 116″ x 66¼″ | Superheating surface | 620 sq. ft. | | | Tractive force | 35,690 lb. |
| Tubes, diam. | 5½″ & 2¼″ | | | | | | |

Originally built with 26″ x 30″ cylinders and a working pressure of 150 lb.

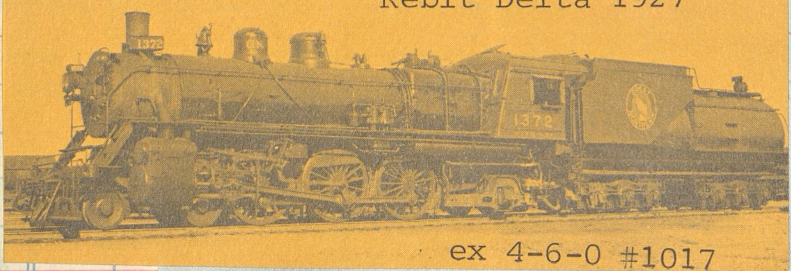
1406-1425 Baldwin 1906

Train #235 ready to depart Harve
on the 293 mile trip to Butte



#1423 reblt with new
cylinders & piston valves, 1926

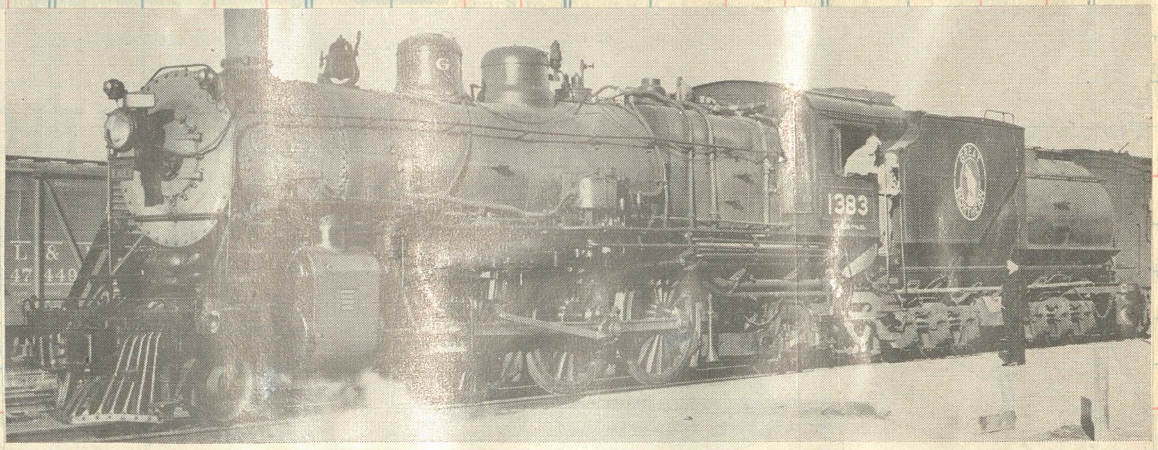
Reblt Delta 1927



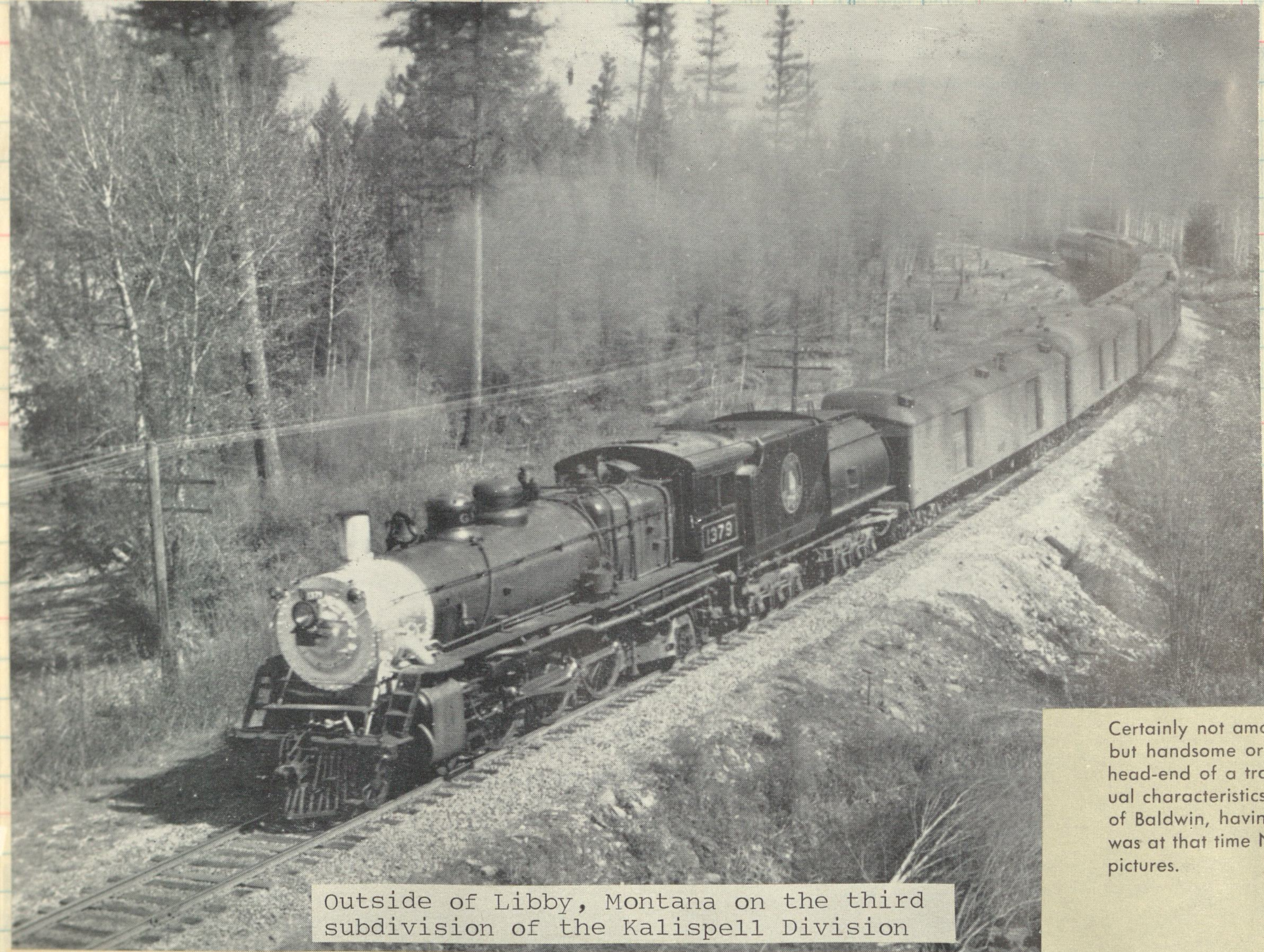
ex 4-6-0 #1017

**EXTRA 1369 EAST** rolls through Chinook, Montana with 14 cars in May of 1946. The Pacific on the point, now trailing a Vanderbilt tank is better looking than most of the class that still used the older rectangular tenders, and the solid type lead truck wheels are more modern appearing than the older spoked style. The only real clues to the age of the engine (Baldwin 1910) are the old high domes and semi-shotgun stack and a cab that is huge, compared to the diameter of the boiler. (W. R. McGee)

Blt as 4-6-0 #1014
Reblt at Delta 1927



A 1927 Hillyard rebuild. Former 4-6-0 #1037

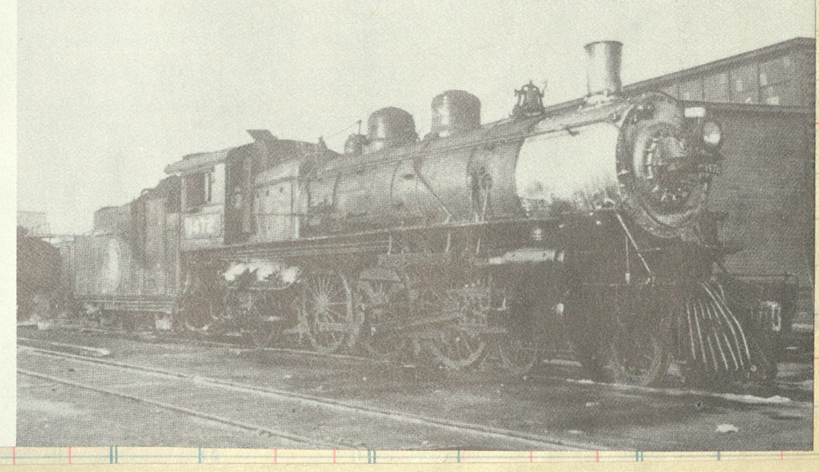


Outside of Libby, Montana on the third
subdivision of the Kalispell Division

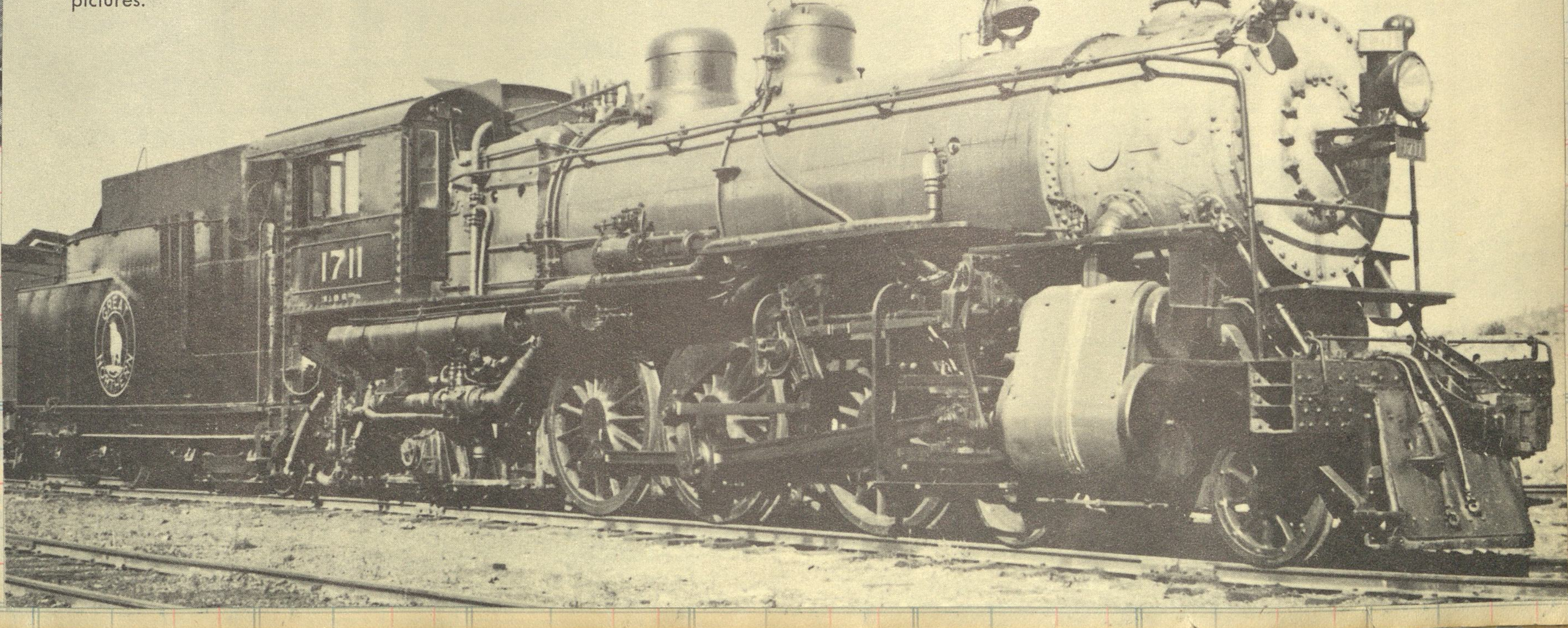
Another Hillyard rebuild (1926) Pacific 1379 keeps to the tight
schedule of #27 the "Fast Mail". Former 10 wheeler #1034.

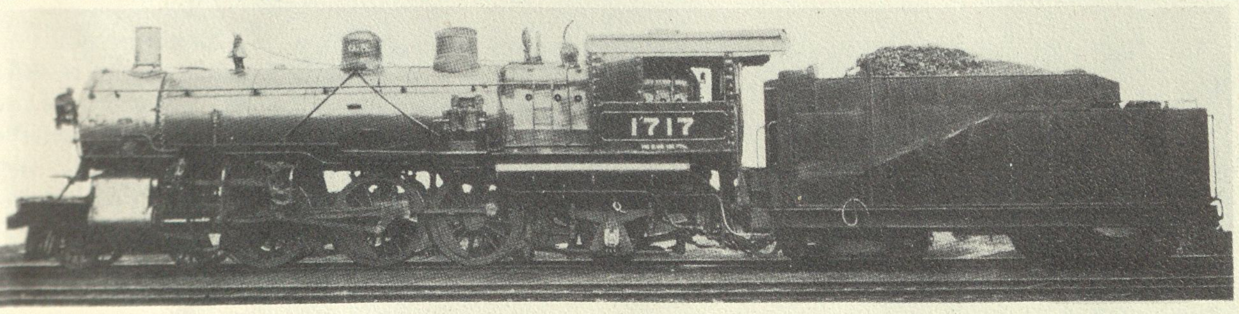
1461-1485

**ELDERLY (LIMA 1914)** coal burning, 73″ drivered Class H-4 Pacific, shows the ravages of time and many shoppings over the years. The odd counterbalance weights on the main drivers indicate attempts by the shops to lessen the rail pounding (dynamic augment) that could be quite severe at medium to high speed, a fault noted in several of the older classes of steam power, such as the Atlantics and 2-10-2's. Odd shaped sand and steam domes were a hallmark of older GN power, as was the outside braced tender. In subsequent rebuildings the features that did not affect the efficiency of the locomotive were often left "as is" and the appearance of the locomotive suffered accordingly. (Casey Adams)



Certainly not among the most handsome of locomotives is this Great Northern No. 1711, but handsome or not there are few rail enthusiasts who would not rather see IT at the head-end of a train than some assembly-line diesel which, completely lacking in individual characteristics, could belong to almost any railroad in the country. 1711 is a product of Baldwin, having been outshopped in 1906 as a Prairie, or 2-6-2 type locomotive and was at that time No. 1572 on the GN. Another of Bob Hanft's many excellent locomotive pictures.

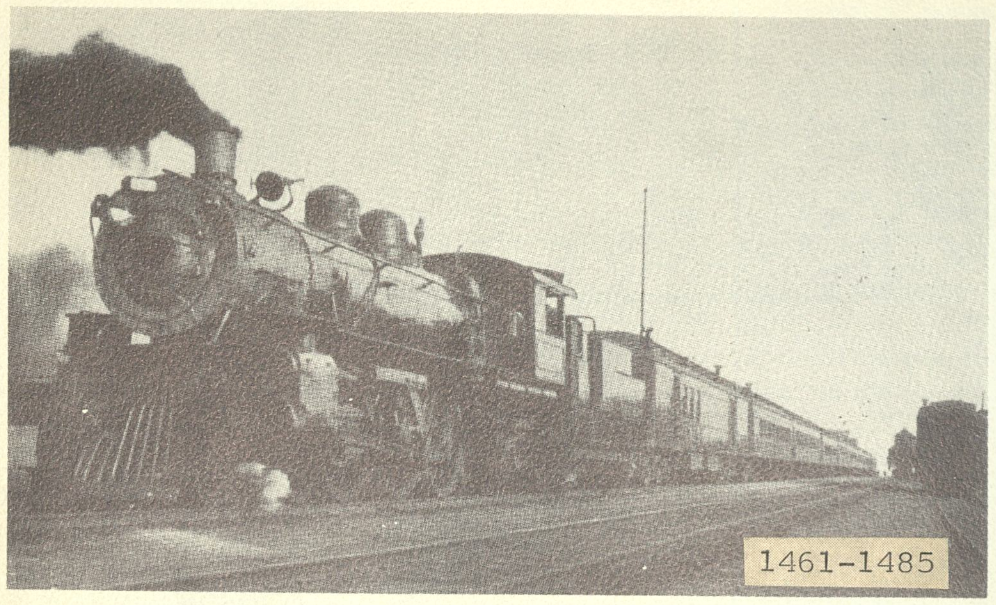




Pacific Type Locomotive, Class H-6, Originally Built by The Baldwin Locomotive Works in 1906 as a Prairie Type Locomotive (Class J-1), and Rebuilt by the Railway Company

| | | | | | |
|---|---|---|---|---|---|
| Cylinders | 23½″ x 30″ | Grate area | 54.1 sq. ft. | Weight on drivers | 161,580 lb. |
| Drivers, diam. | 69″ | Water heating surface | 3065 sq. ft. | " total engine | 249,500 lb. |
| Steam pressure | 200 lb. | Superheating surface | 775 sq. ft. | Tractive force | 40,820 lb. |

15 160


1461-1485

The Oriental Limited Leaving Barnesville, Minnesota

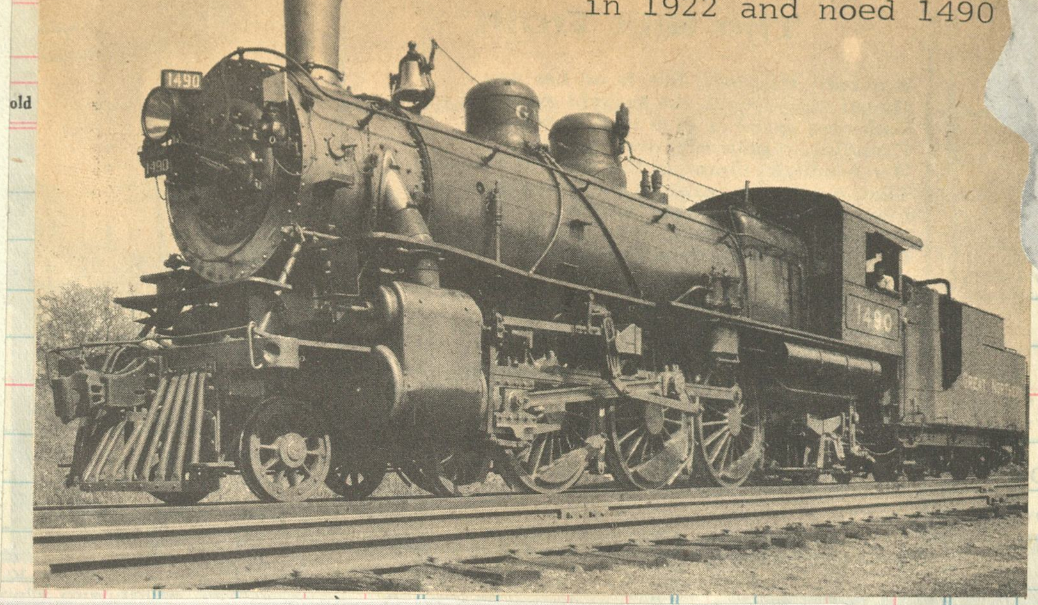
The locomotive is a Pacific type, Class H-4, built by the Lima Locomotive Works, Inc., in 1914.

| | |
|---|---|
| Cylinders | 23½″ x 30″ |
| Drivers, diam. | 73″ |
| Steam pressure | 185 lb. |
| Grate area | 53.4 sq. ft. |
| Water heating surface | 3104 sq. ft. |
| Superheating surface | 670 sq. ft. |
| Weight on drivers | 150,700 lb. |
| " total engine | 251,200 lb. |
| Tractive force | 35,690 lb. |

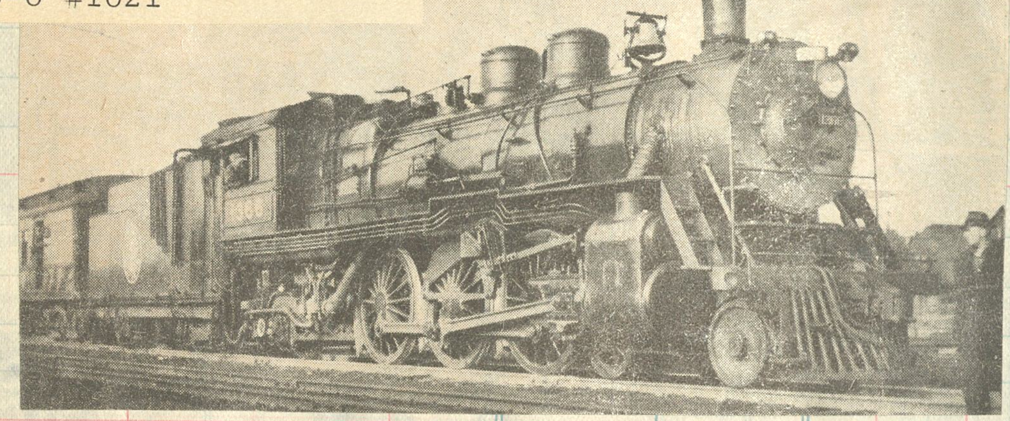
This class originally carried 210 lb. pressure and developed a tractive force of 40,500 lb.

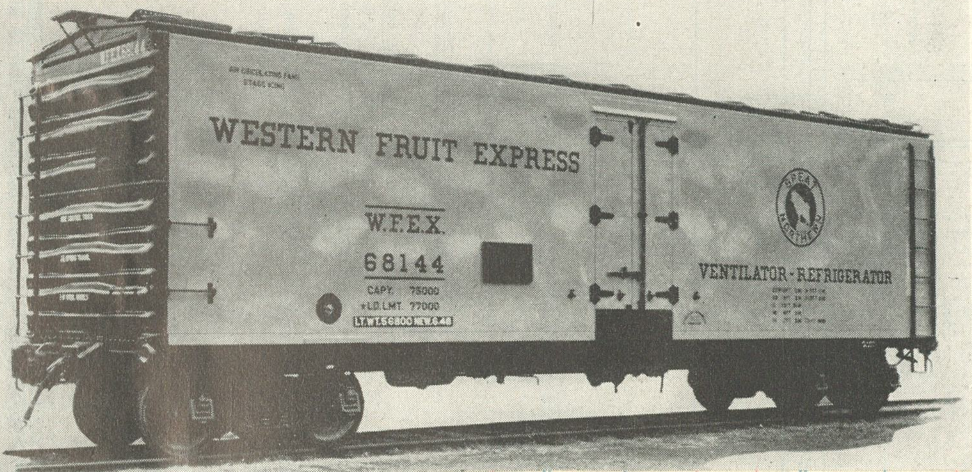
old

Blt by Baldwin 1909 cn 33910
as 4-6-0. Reblt at Dale St
in 1922 and noed 1490



1366 reblt in 1927 from
4-6-0 #1021





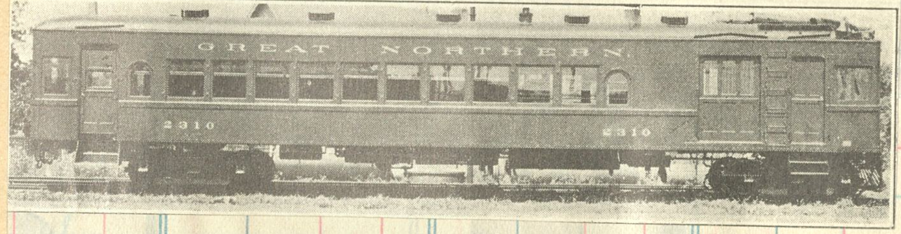
Western Fruit Express, 40-ton, 40-ft., steel refrigerator car with stage icing and air circulating fans. Builder, American Car and Foundry Co.

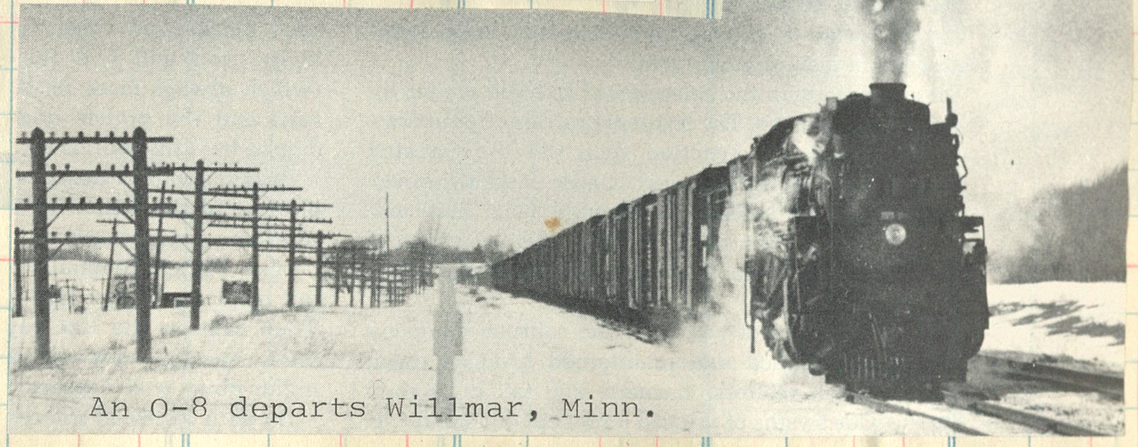
Inside length between bulkheads 33 ft. 2¾ in.; width 8 ft. 3 in.; height 7 ft. 3 in.; capacity 1,988 cu. ft.; light weight 56,800 lb.; load limit 77,000 lb.

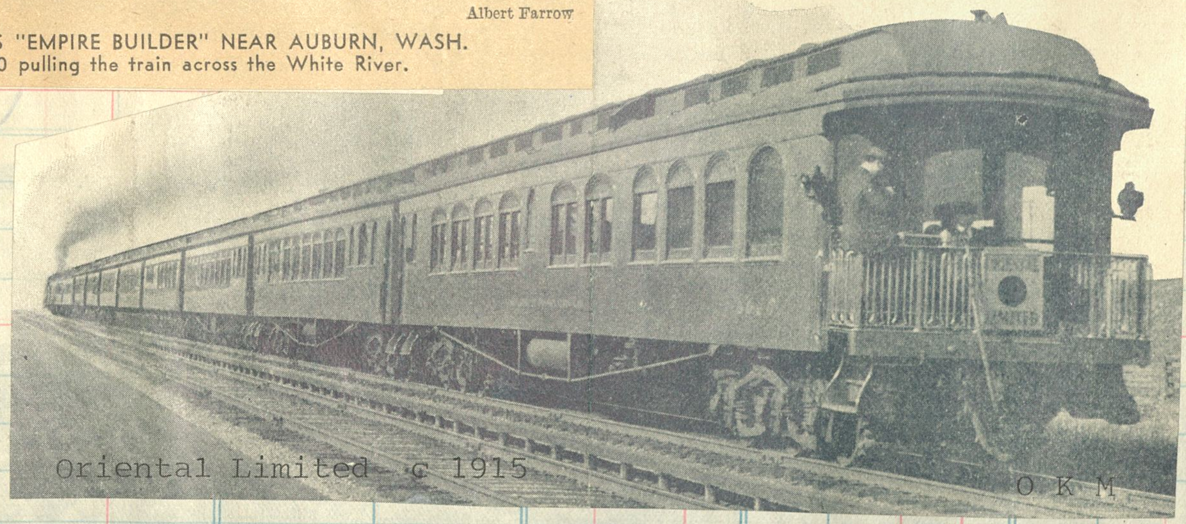
Albert Farrow

GREAT NORTHERN'S "EMPIRE BUILDER" NEAR AUBURN, WASH.
Locomotive 2500 pulling the train across the White River.

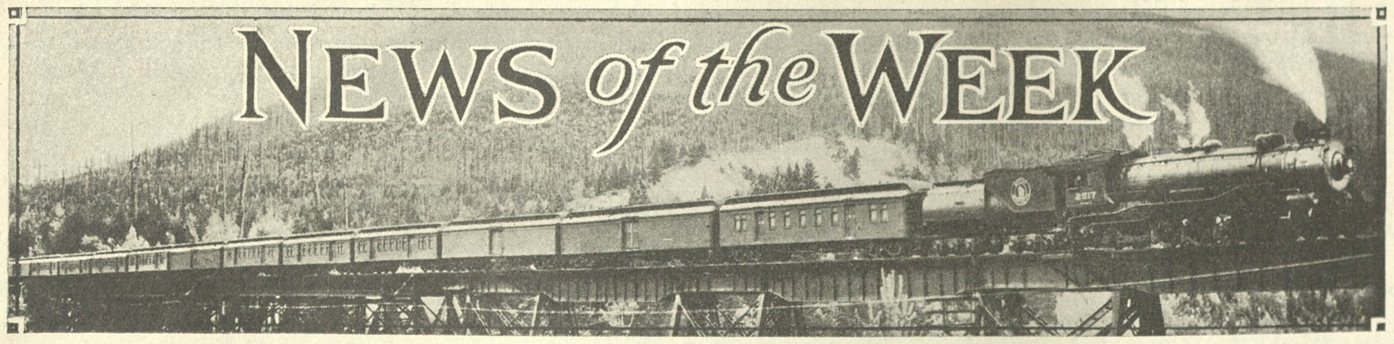
Elec Motive 1925

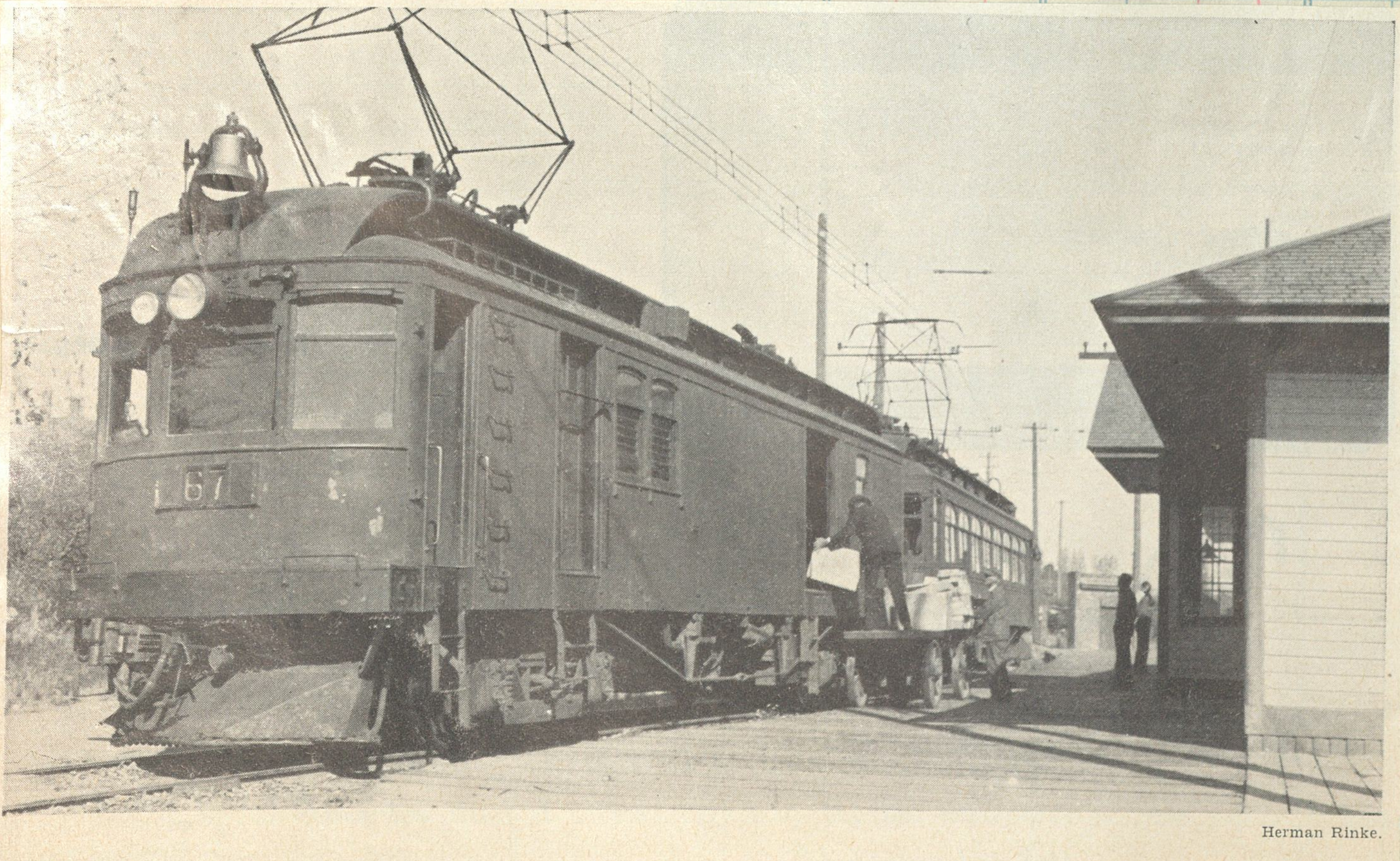



An O-8 departs Willmar, Minn.

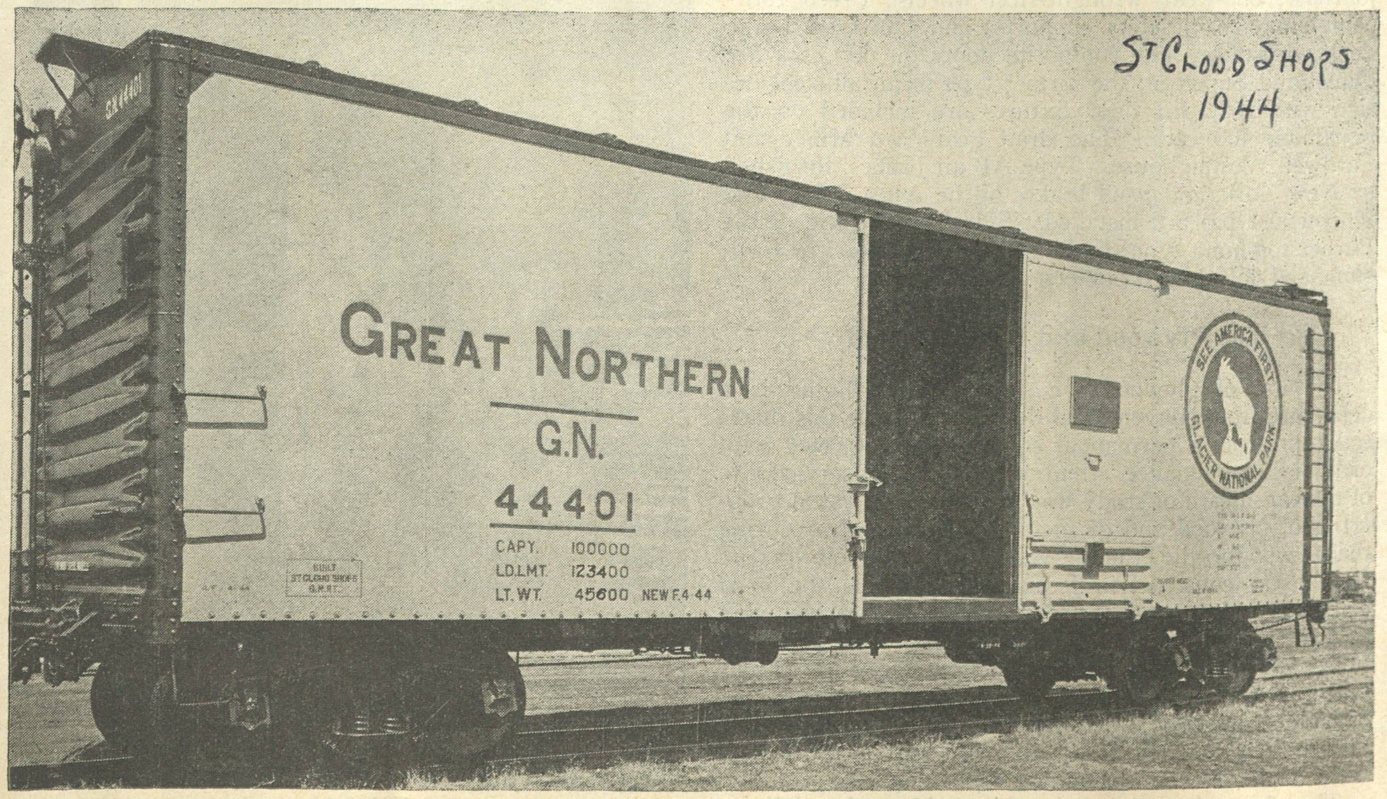

Oriental Limited c 1915 O K M

NEWS of the WEEK




Herman Rinke.

The old Spokane & Inland Empire Railroad, later operated by the Great Northern as the Spokane, Coeur d'Alene & Palouse Railway, ran trains from Spokane, Wash., to Colfax, Wash., Coeur d'Alene, Ida., and Moscow, Ida. Late on an October afternoon in 1936, the photographer captured the quiet charm of mild activity at the Moscow station as agent and motorman loaded R.P.O.-baggage combine No. 1 for the return trip to Spokane. One daily passenger round trip polished the contact wire on this 90-mile branch at the time; today only diesel freight operates.


St Cloud Shops
1944

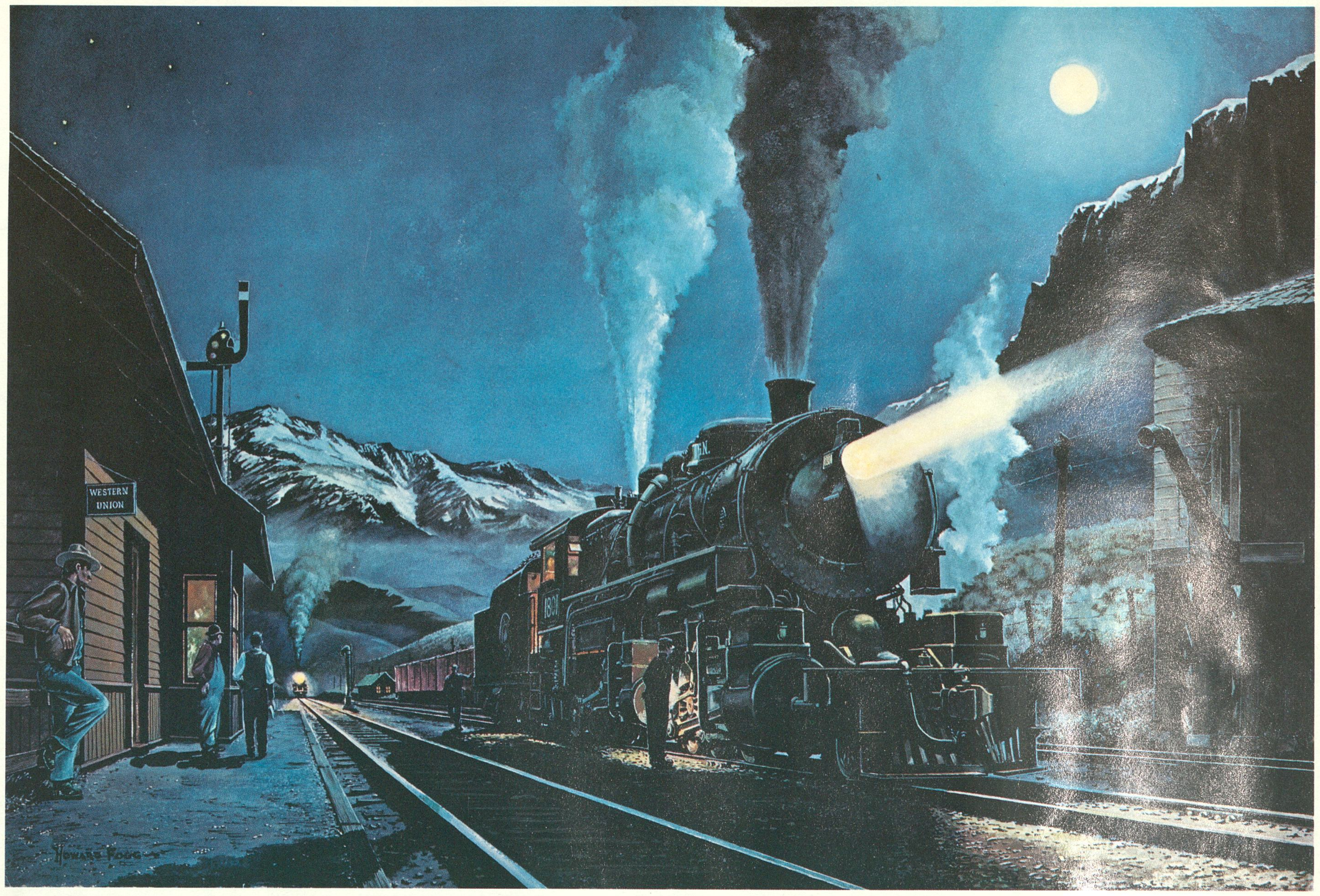
The Great Northern Fifty-Ton Plywood Box Car

Clos. No. Sold Amount Clos. No. Sold

a 461)

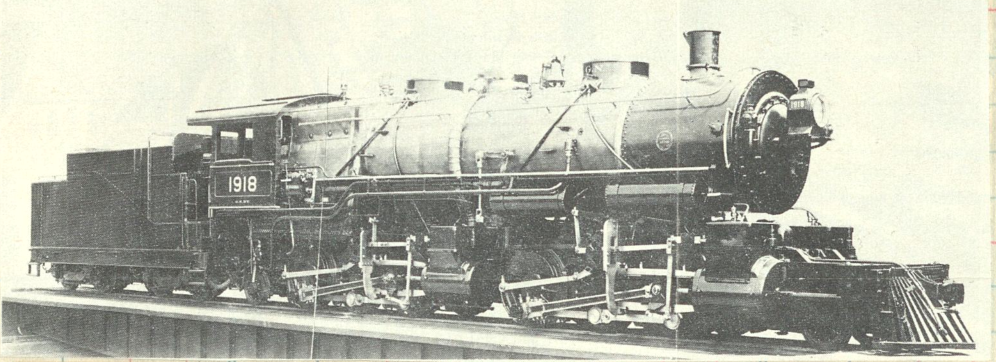
CUT HERE To Make Short Sheet

o. Sold Amount Clos. No. Sold Amount Clos. No. Sold Amount

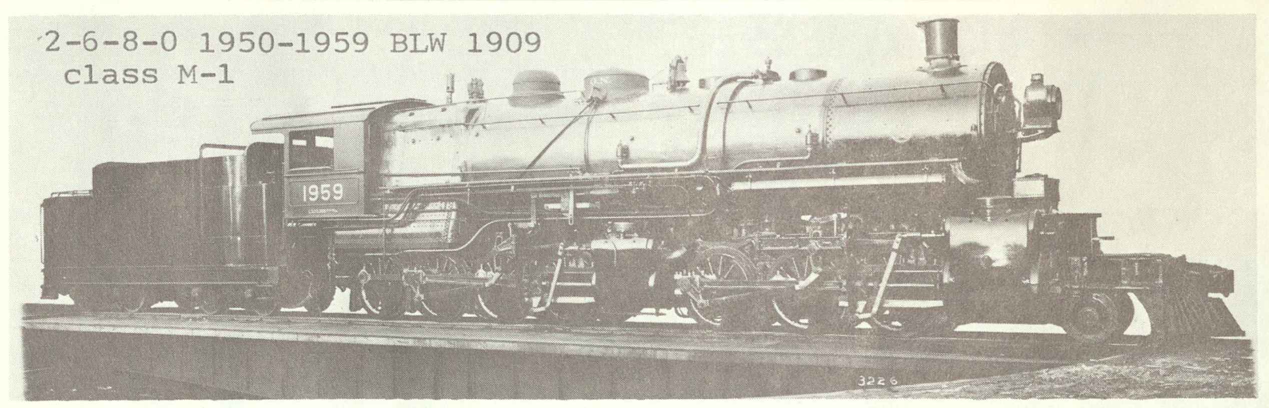


Cascade Helper by Howard Fogg

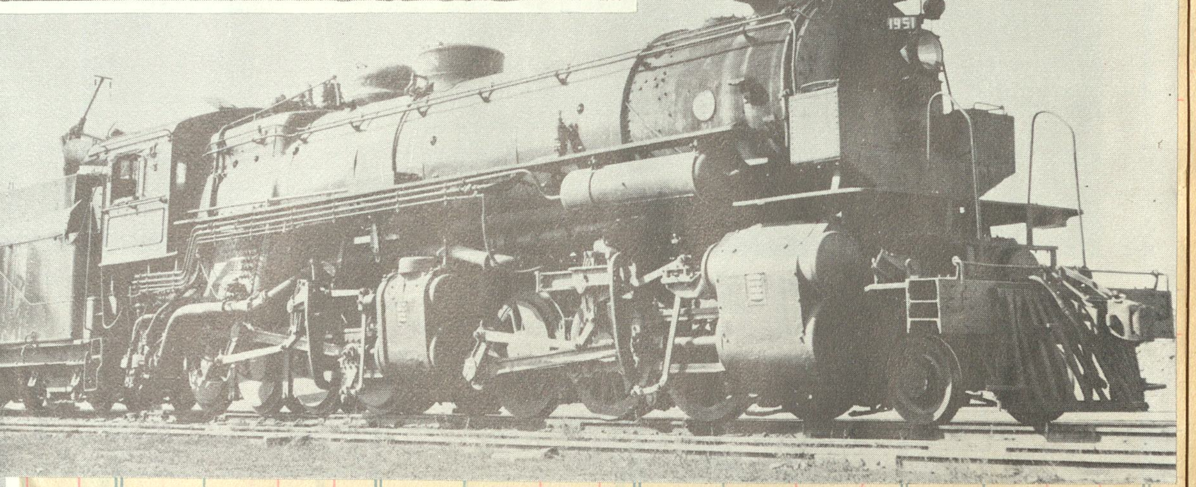
Grant 1888 C/N 1766
To Wallace & Couer D'Alene
#1 to NP 150

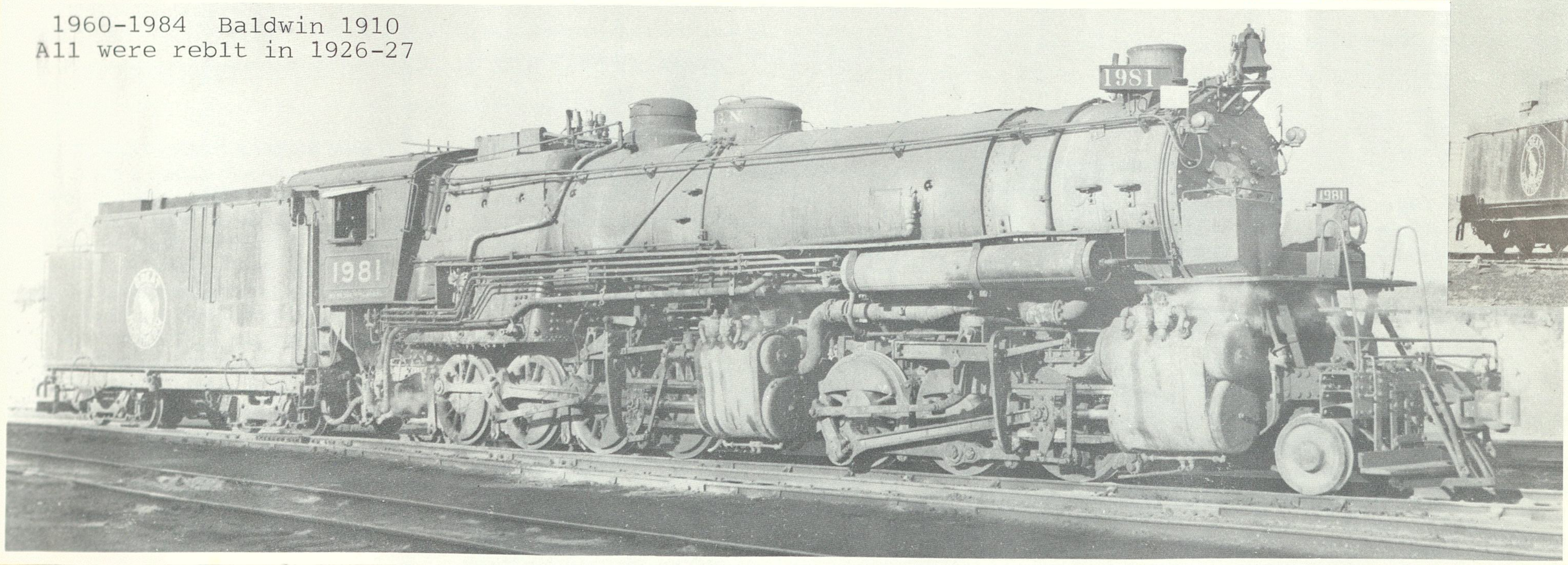


Delivered by Baldwin 1908 c/n 32748. Was dismantled at Hillyard in Oct 1925 with parts going into building of 0-8 2-8-2 #3360

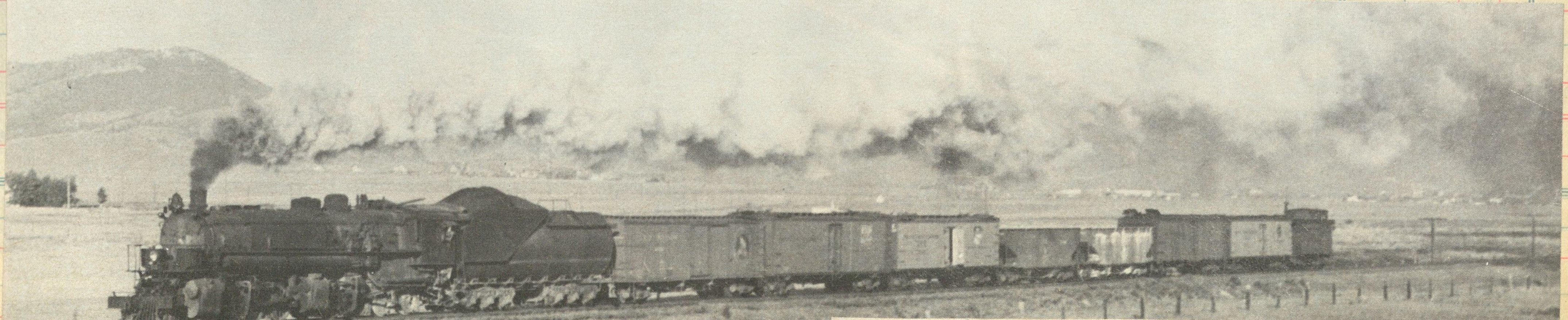


2-6-8-0 1950-1959 BLW 1909
class M-1





1960-1984 Baldwin 1910
All were reblt in 1926-27



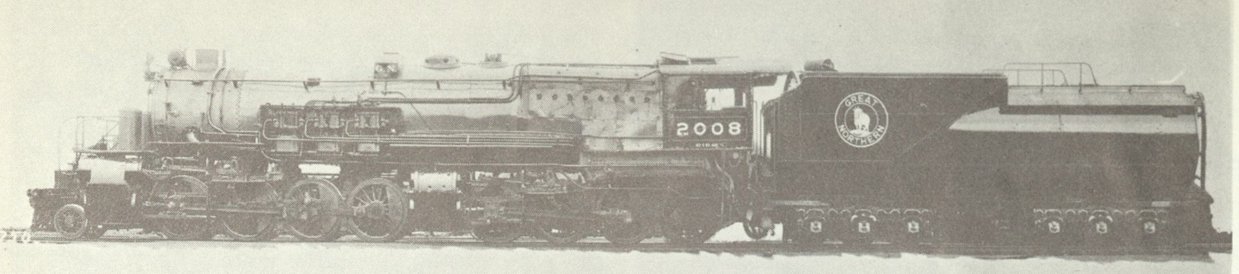
THIS shot of Great Northern Extra 1981 West was taken from the cab of Northern Pacific Extra 5104 West while the NP class Z-6 engine was hitting 45 mph between East Helena and Helena on June 24, 1939.

Total
Add Error
Deduct
Total
Add Working Fund
Total to be Accounted for
Cash to Agent
Agent's Signature
Cash to next Seller
Next Seller's Signature
Total Accounted for

162

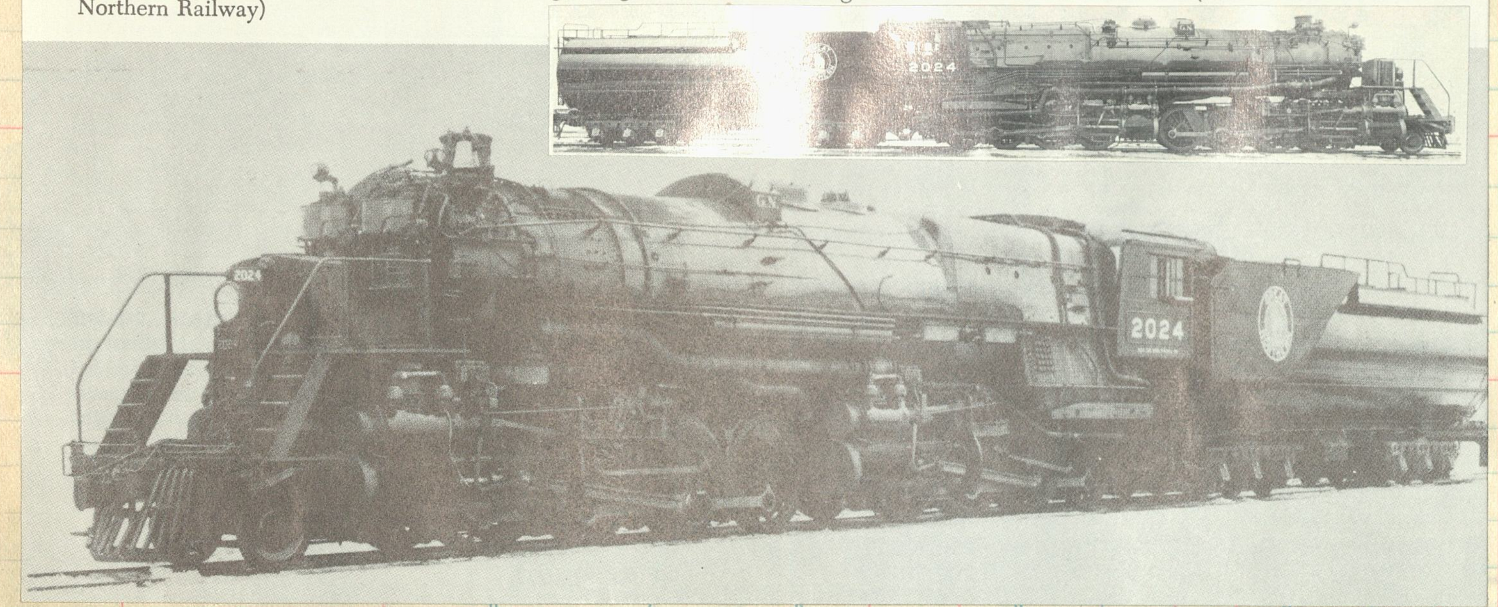
SELLER
DATE
FORM

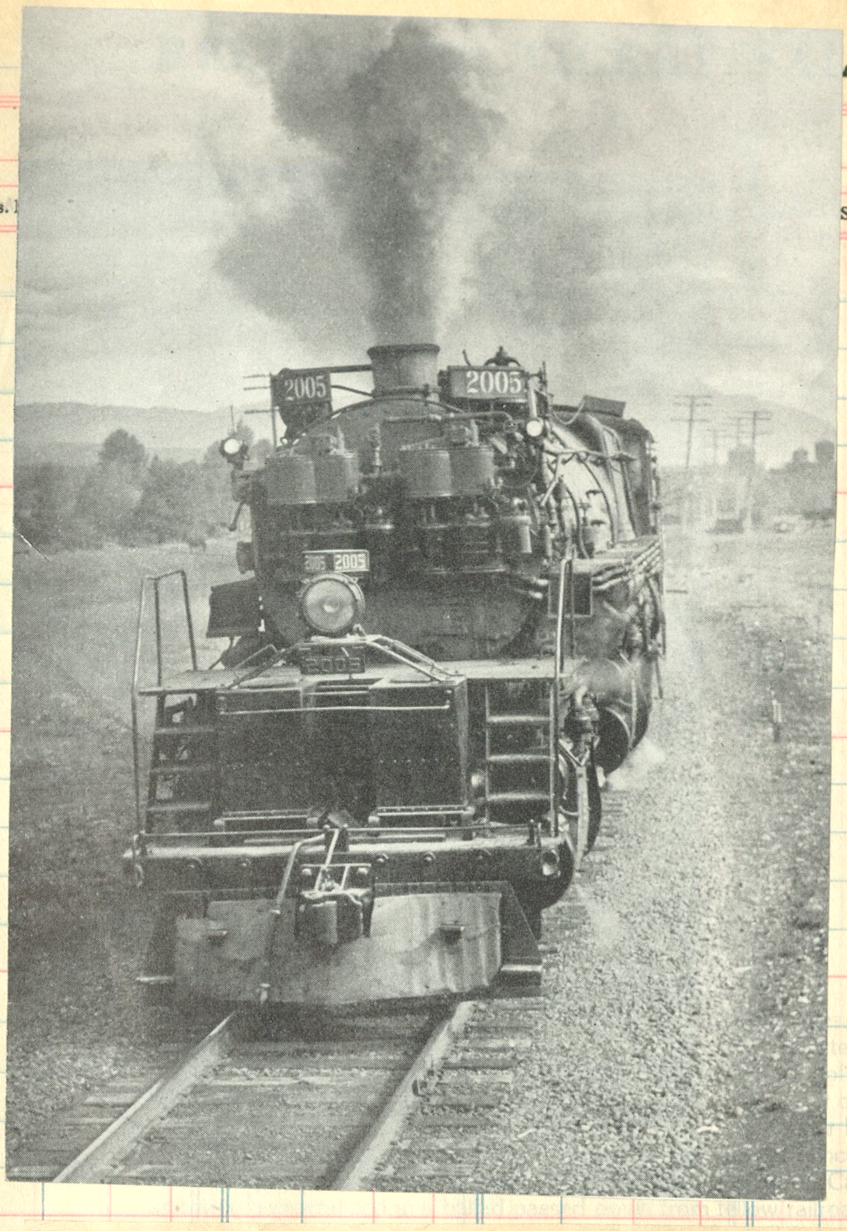
2000-2024 class N-1 Baldwin 1912

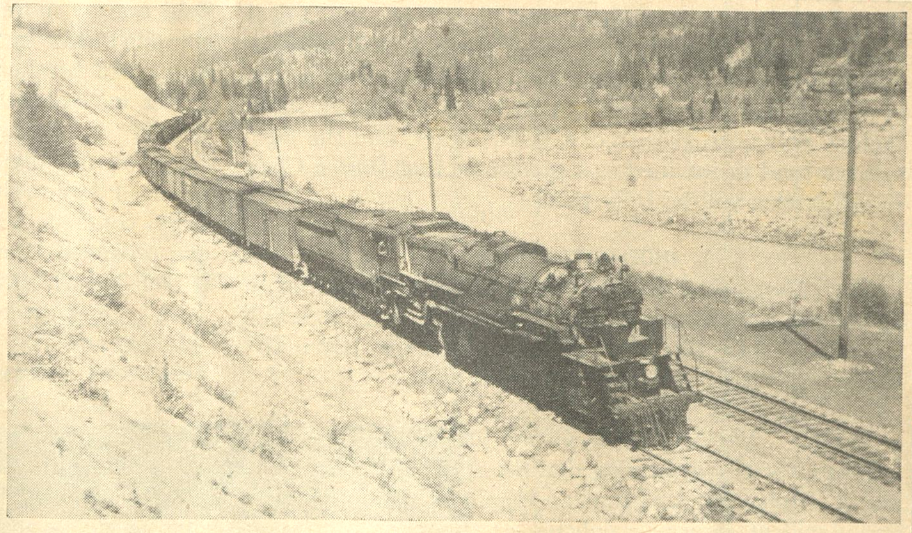


All rebuilt at Superior Shops (1924-27) reclassed N-2

**N-3 CLASS 2-8-8-0** No. 2024, one of 25 similar locomotives, was about the most modern articulated locomotive on the Great Northern roster. Built by Baldwin in 1912 as a compound Mallet, the entire class was simpled during 1925/27. Then in 1940/41 a further modernization, at a cost of 3½ million dollars, provided the class with new nickel steel boilers and appliances and semi-streamlined the cabs by slanting the front edges forward. At this time too, the engines received roller bearings on the drivers, the only class of GN articulateds so equipped. The GN owned only two articulated freight engines equipped with either a four wheel leading or trailing truck, and in fact, over half of the modern articulated fleet (M-2 and N-3 class) had no trailing trucks of any description. The policy of the motive power department seemed to be to put all weight possible on the drivers for maximum tractive effort. The tractive effort of the N-3's was second only to the R-1/R-2 class and was rated at just over 104,000 lbs. Although the articulateds were never seriously considered as dual service engines, during the war, the N-3's were often used on troop trains. Mr. J. S. Miller, Assistant to the Superintendent of Motive Power in 1945/46, has commented the N-3's in troop train service "could run like a deer" at speeds of 50 to 60 mph—most unusual for an articulated freight engine without a trailing truck or four wheel lead truck. (Great Northern Railway)



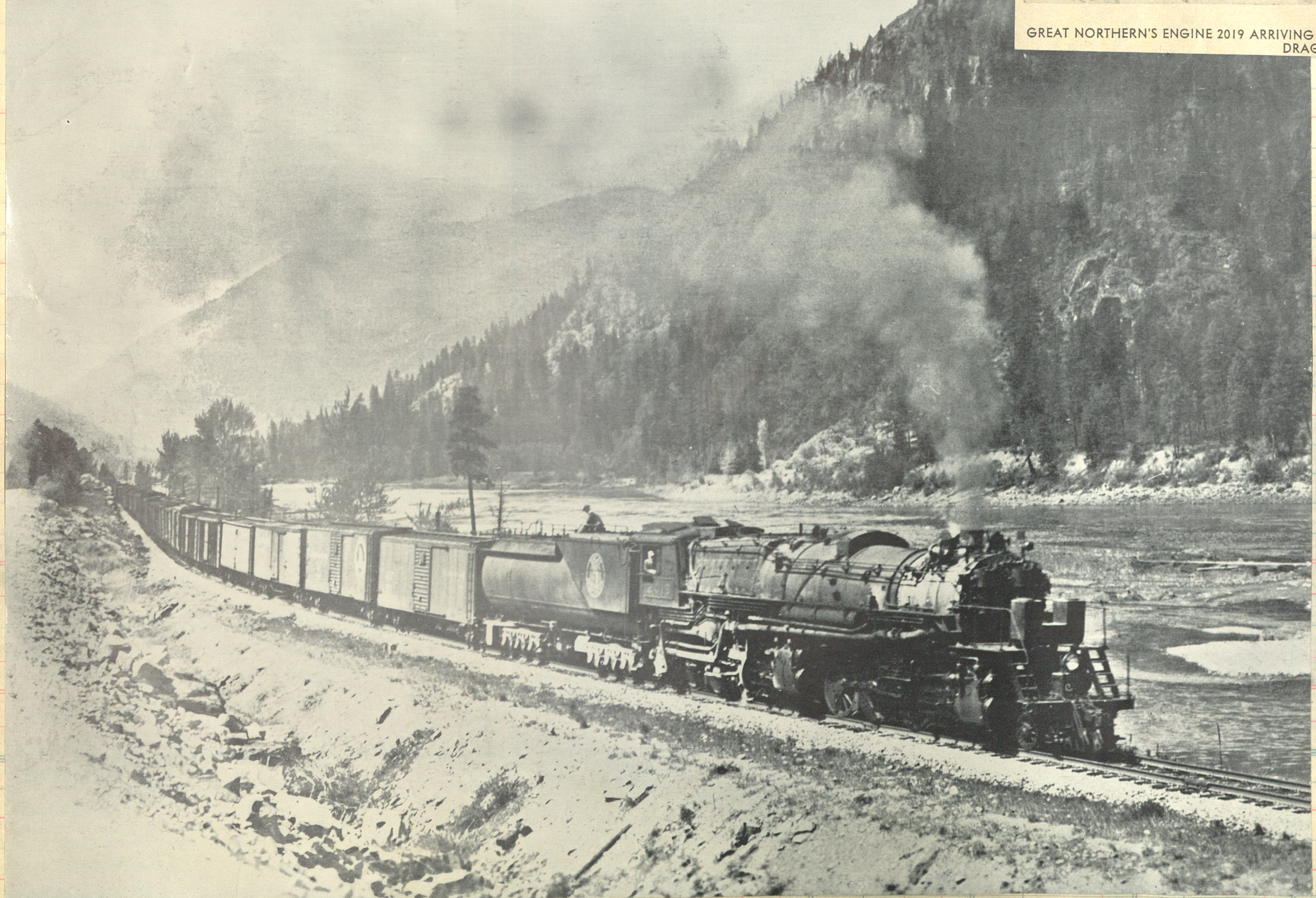




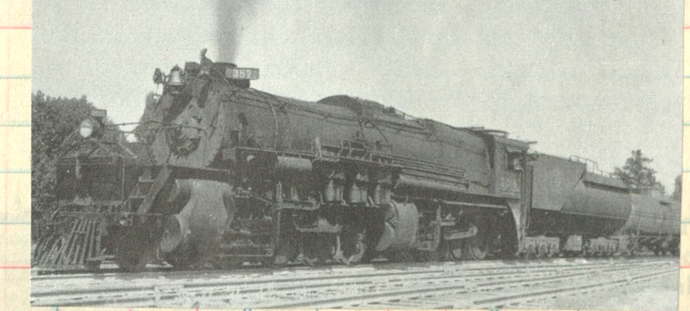
W. R. McGee

GREAT NORTHERN'S ENGINE 2019 ARRIVING AT TROY, MONT., WITH HEAVY FREIGHT DRAG

Eng 2019 heads an eastbound extra along the Kootenai River 18 miles east of Troy, Montana

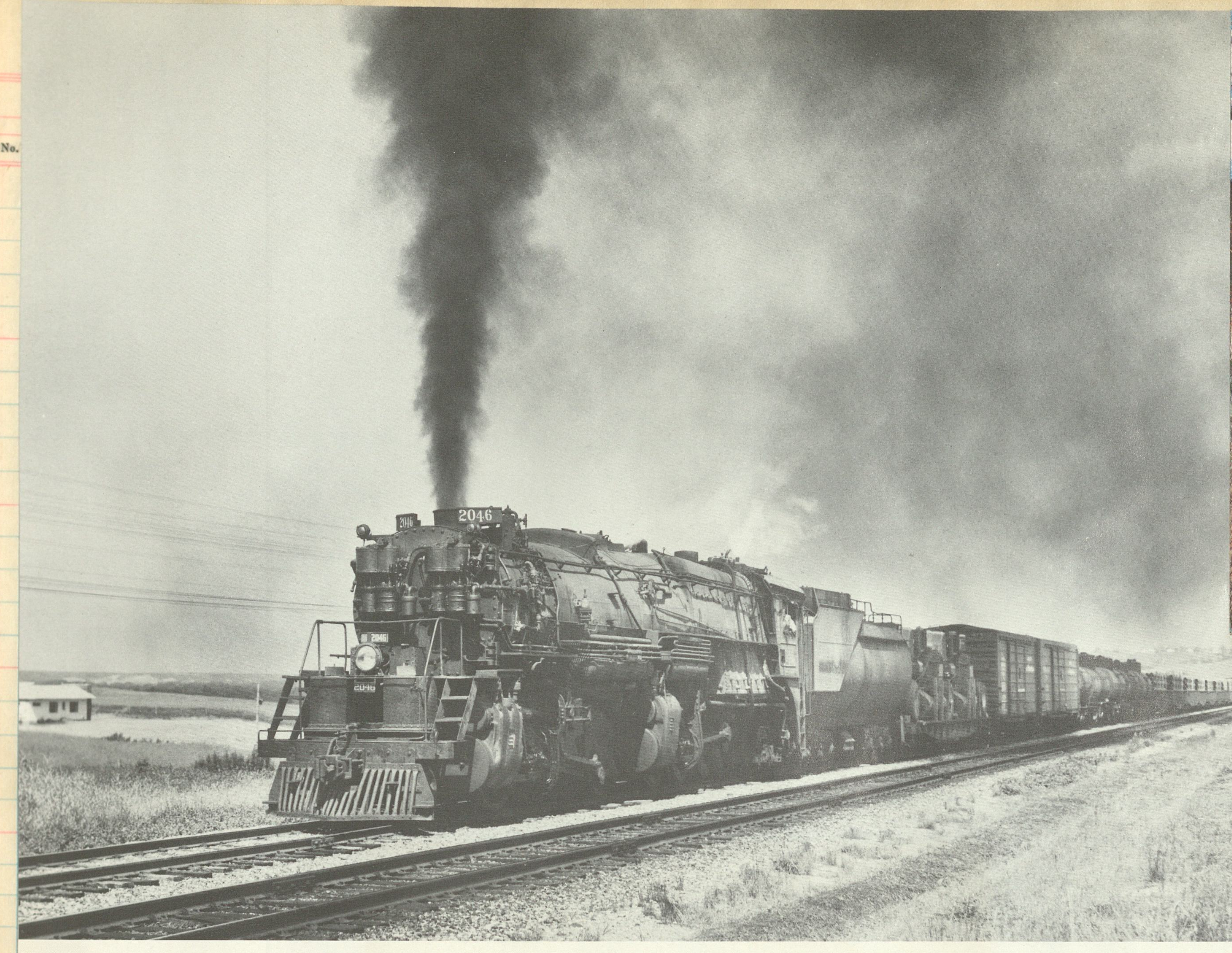


The 2018 on Trn 387

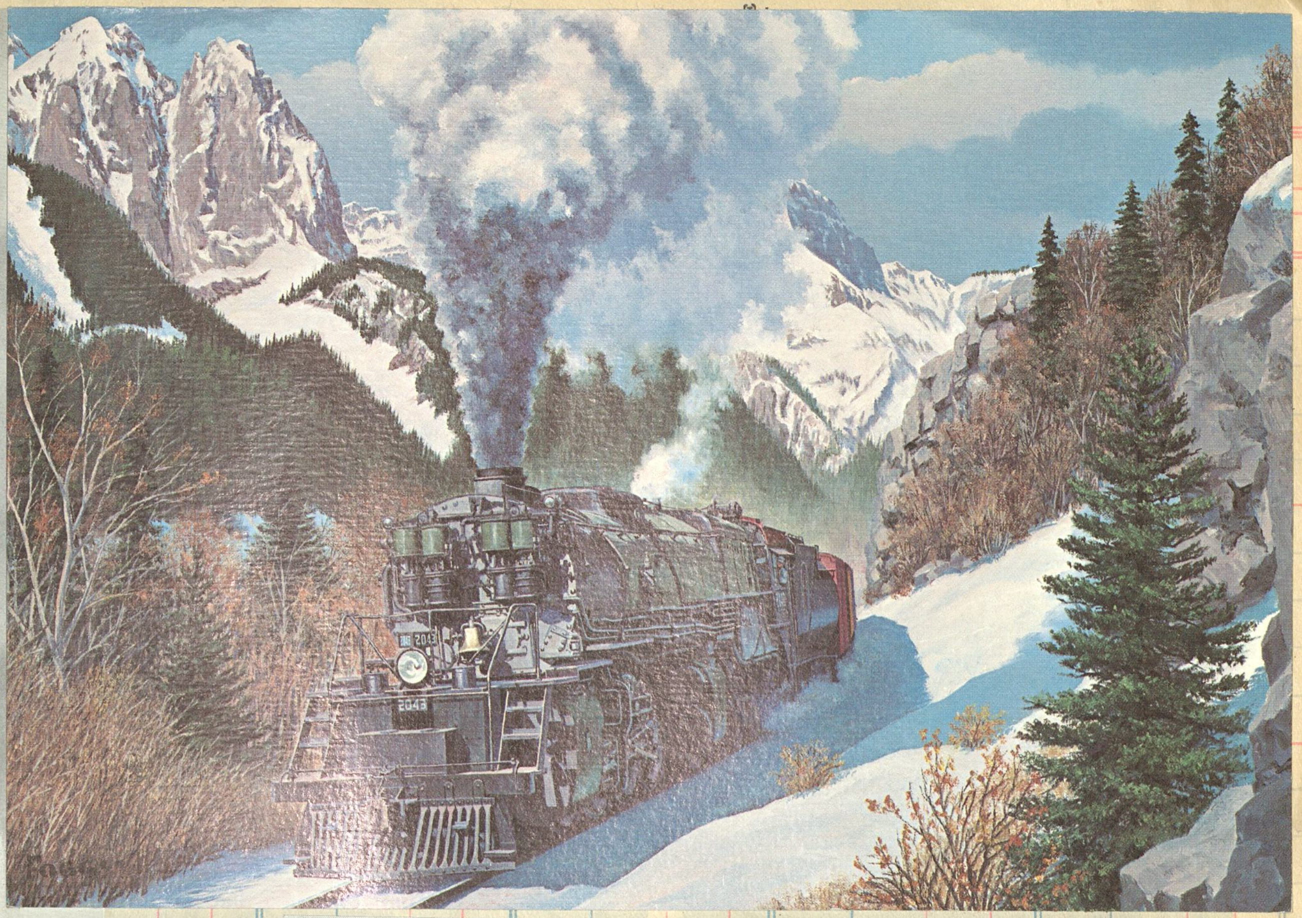


Kremlin, Mont.

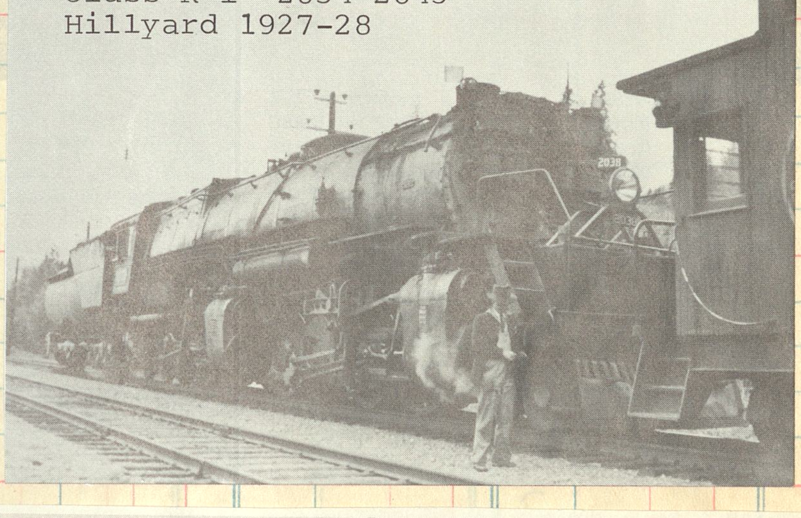
Cls. No.



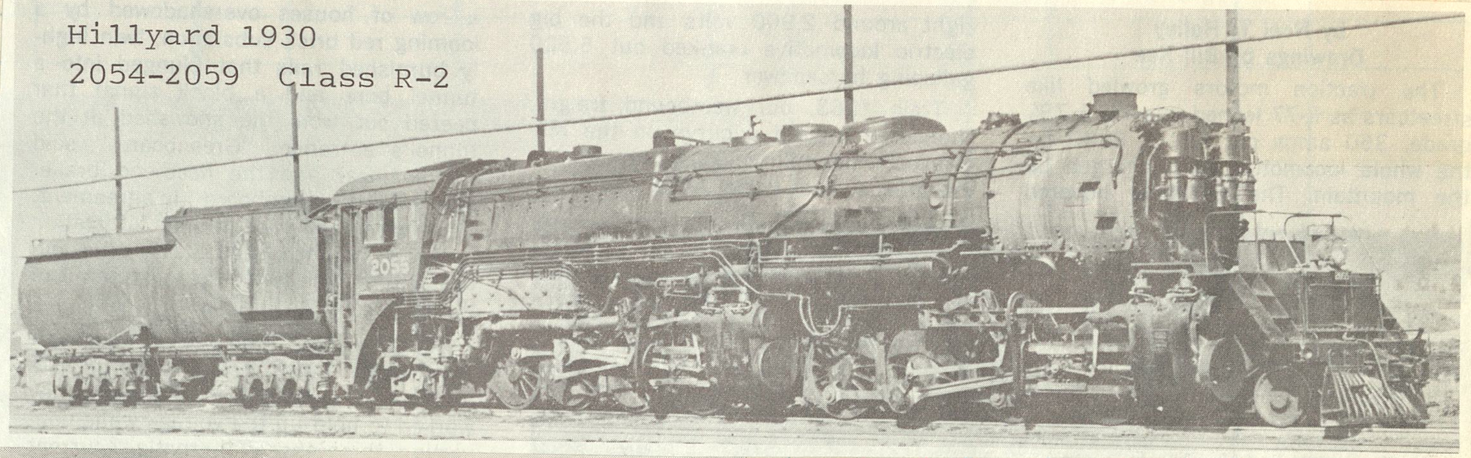
*Great Northern 2nd 401's 75 cars stretch out behind Simple Articulated 2046, class R-2. The big 2-8-8-2 is working at Minot, N.D. at 3:15PM, July 13, 1953.*

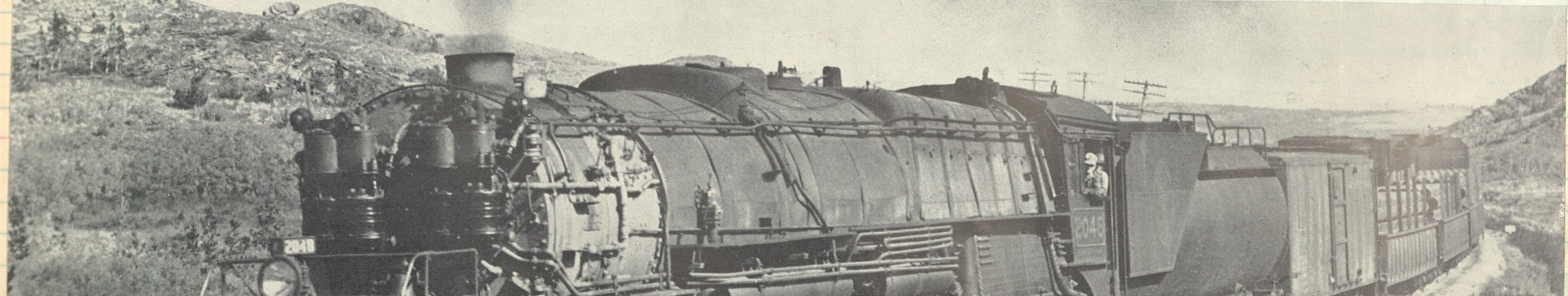


Class R-1 2034-2043
Hillyard 1927-28



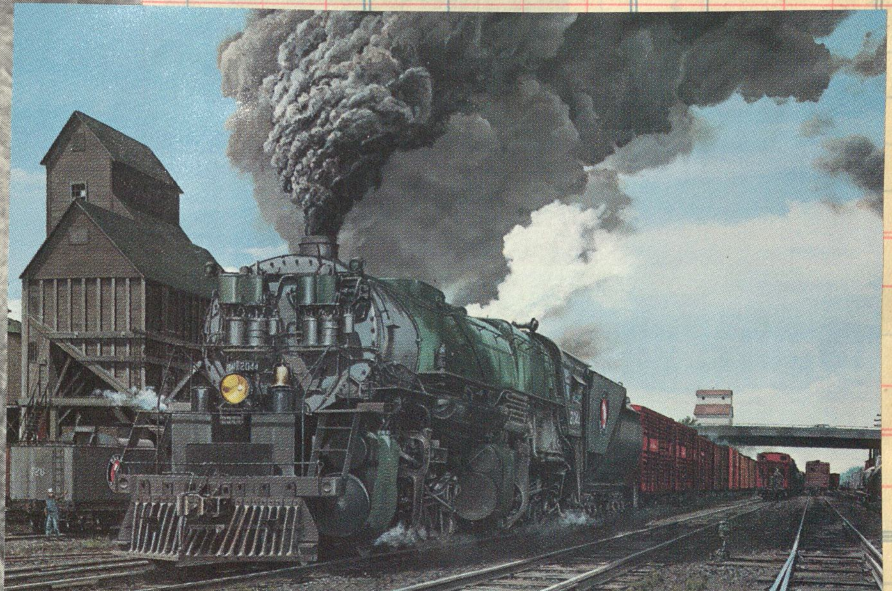
Hillyard 1930
2054-2059 Class R-2

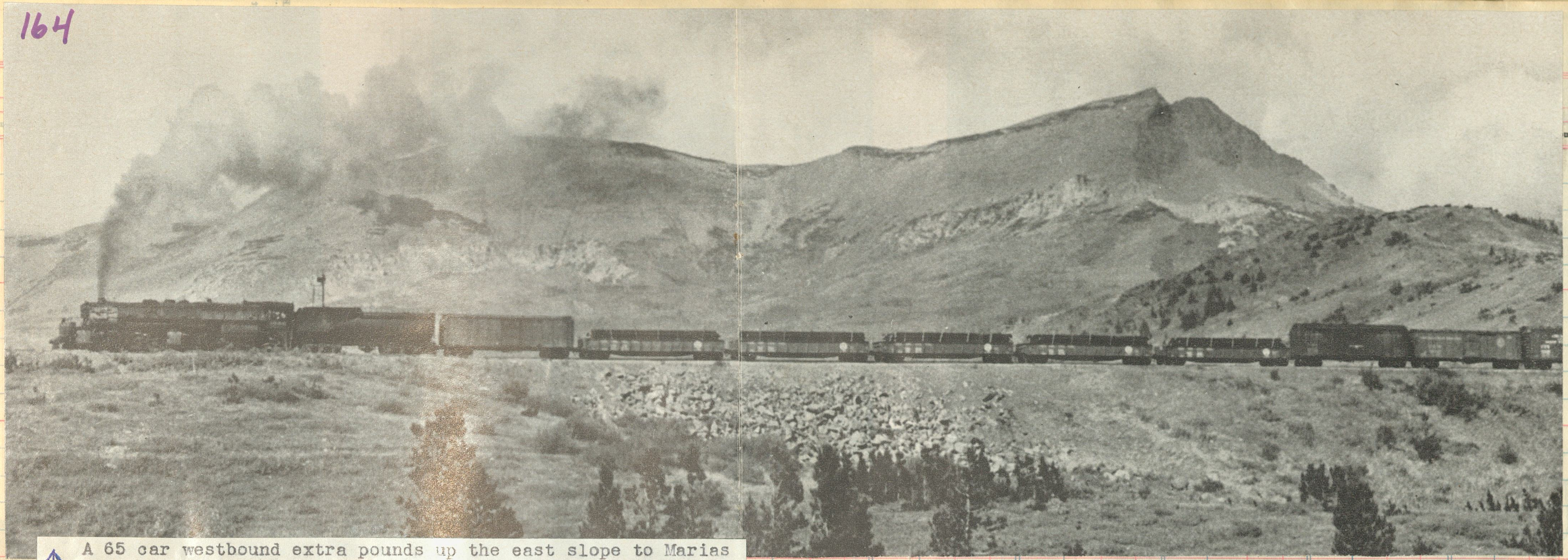




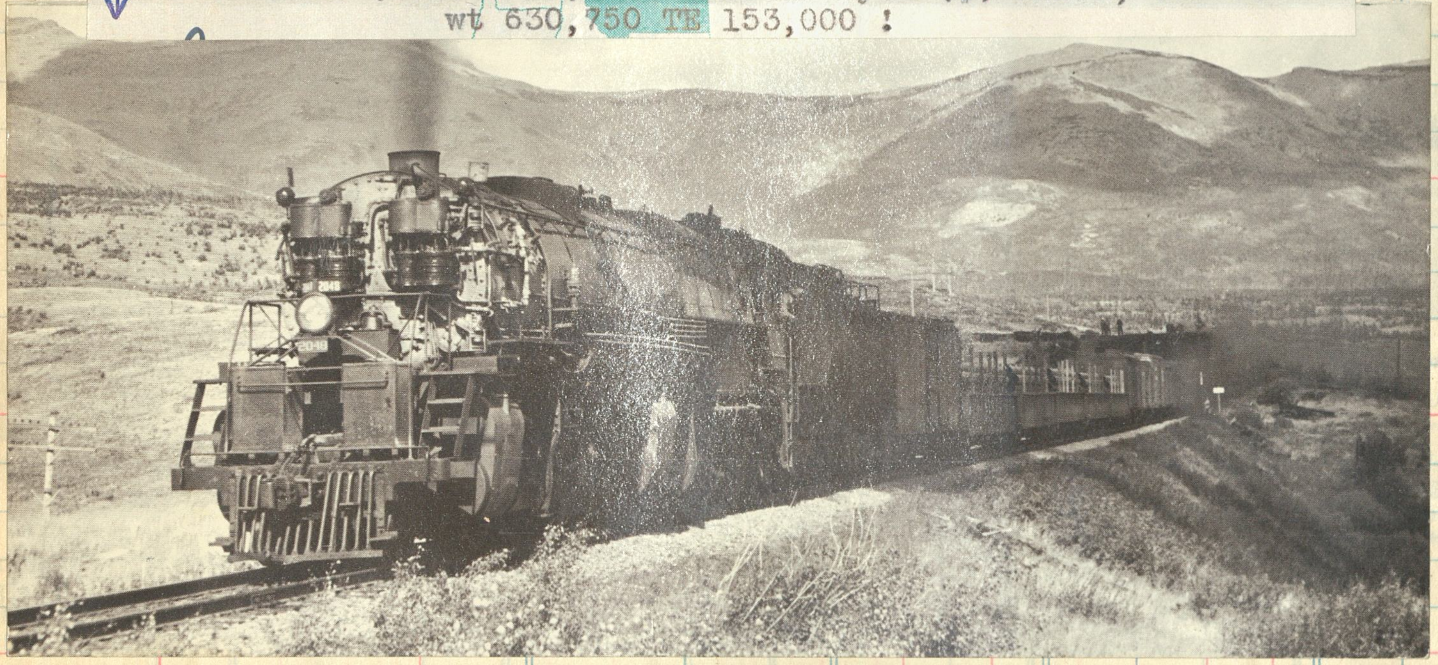
Class R-2 2044-2053 Hillyard 1929

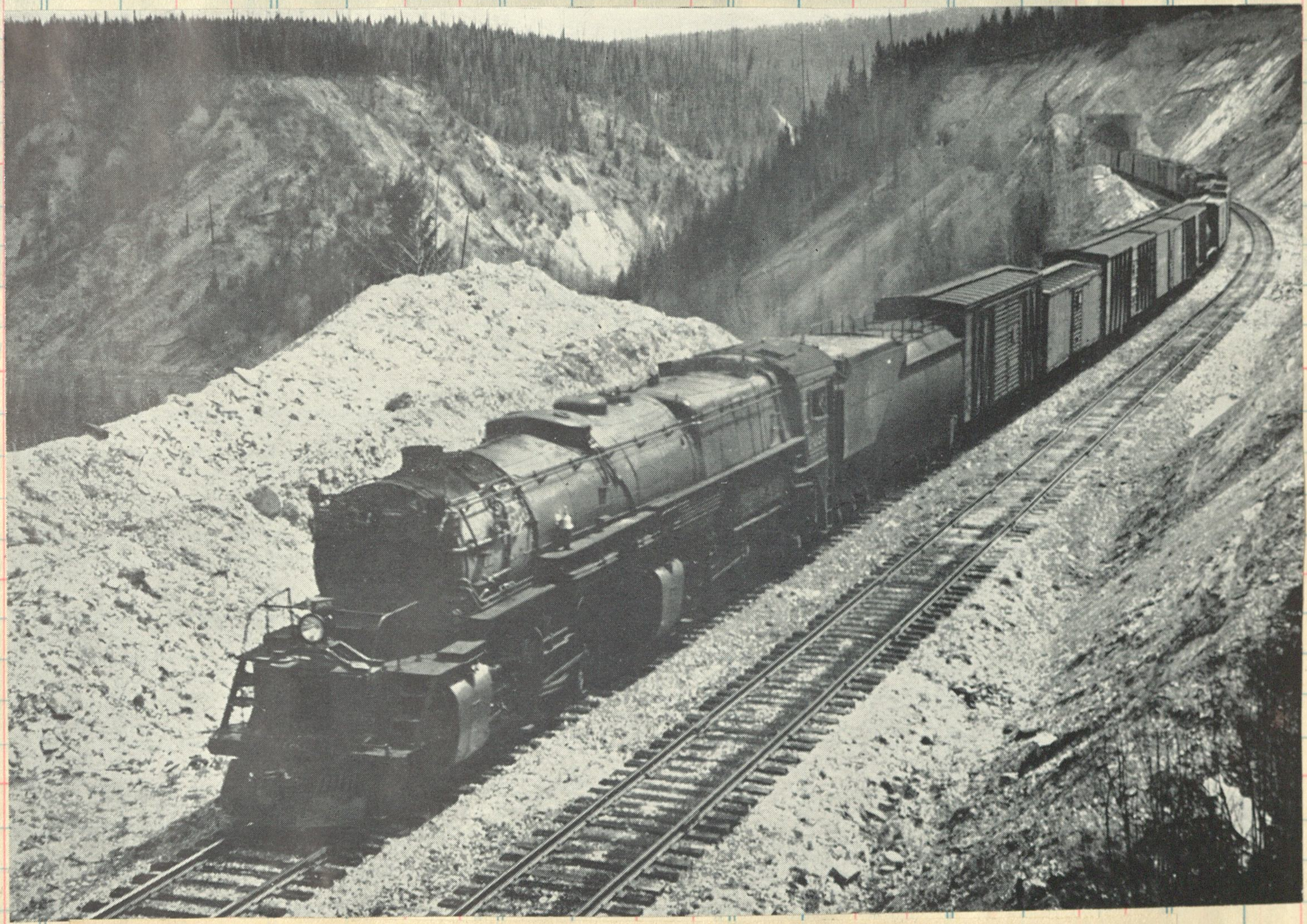
A 2-8-8-2 simple articulated climbing the east slope of the continental divide east of Glacier National Park with a 65-car freight train. Photo by Henry Griffiths.



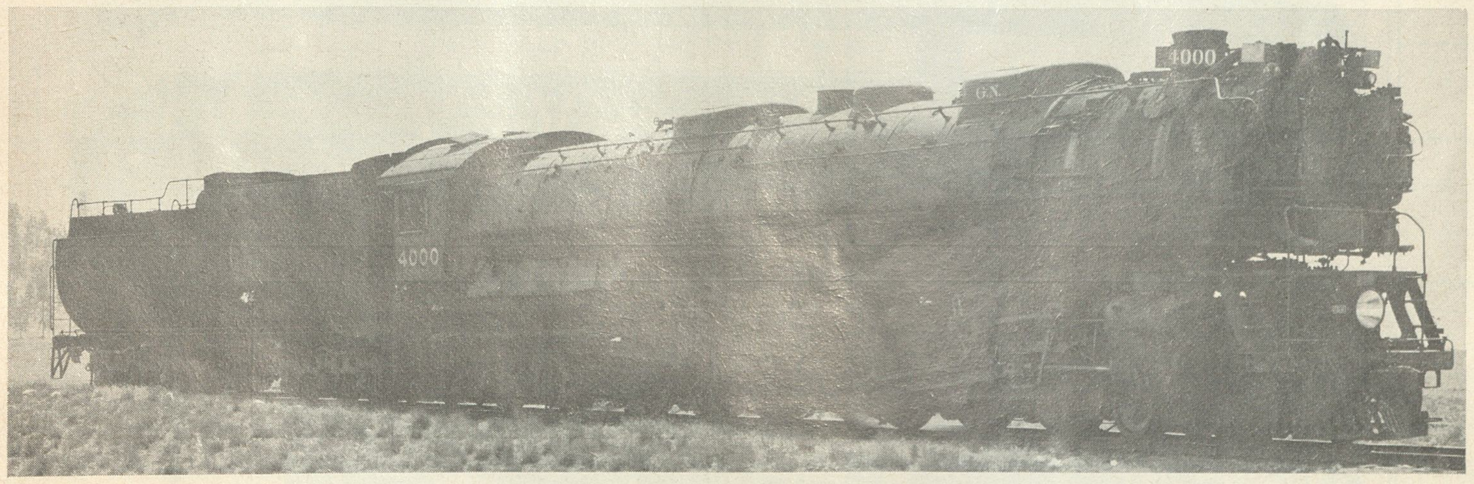


A 65 car westbound extra pounds up the east slope to Marias Pass behind one of the massive home made 2-8-8-2's of the R-2 class (2044-2059) blt 1929-30 Cyls (4) 28x32, dvs 63" wt 630,750 TE 153,000 !

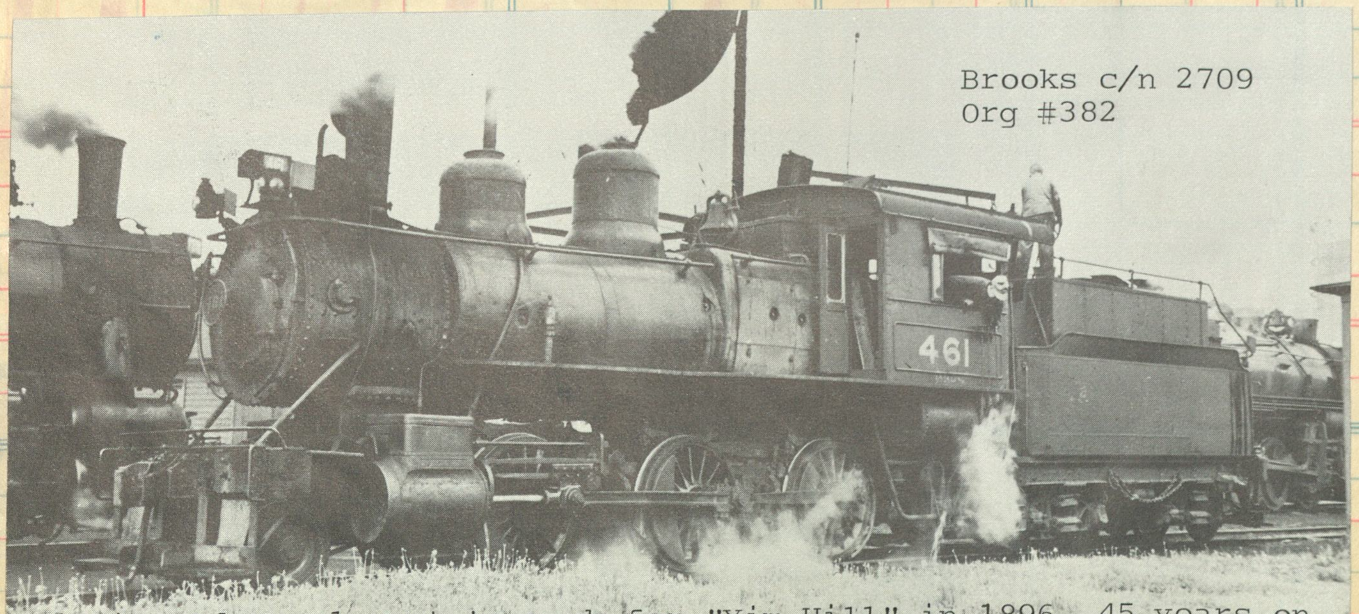




In rough canyon country along the North Fork of the Flathead River near Pinnacle, Mont.

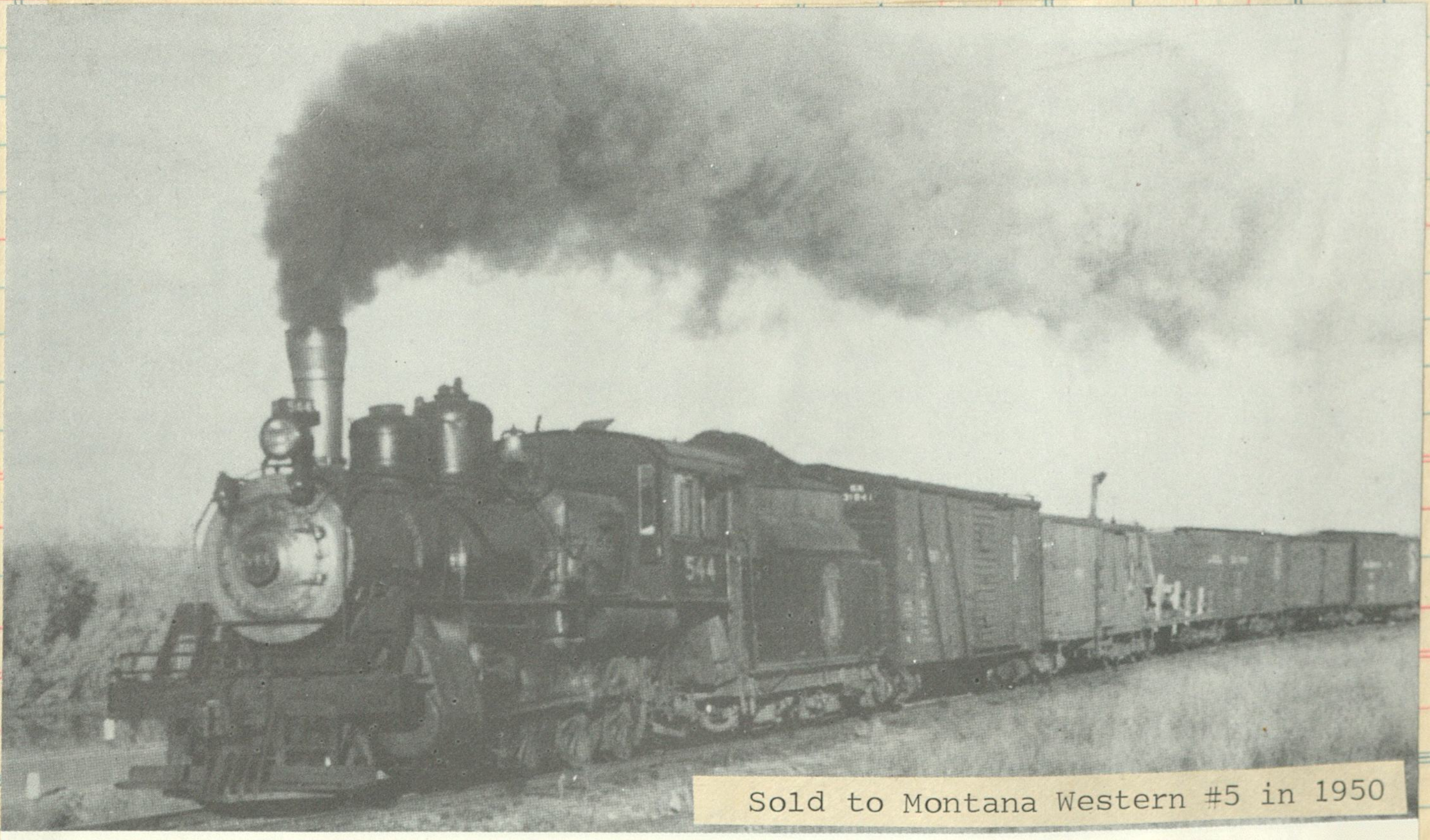


**MOST** locomotive students believe that because Great Northern ceased buying new steam power in the depression it thus passed up such high-speed roller-bearing power as the Challenger. Not so. In 1939 Big G acquired two Northern Pacific Z-6 design 4-6-6-4's from Spokane, Portland & Seattle, a joint GN-NP subsidiary. Ex-SP&S 903-904 operated as GN Nos. 4000-4001 until 1950.



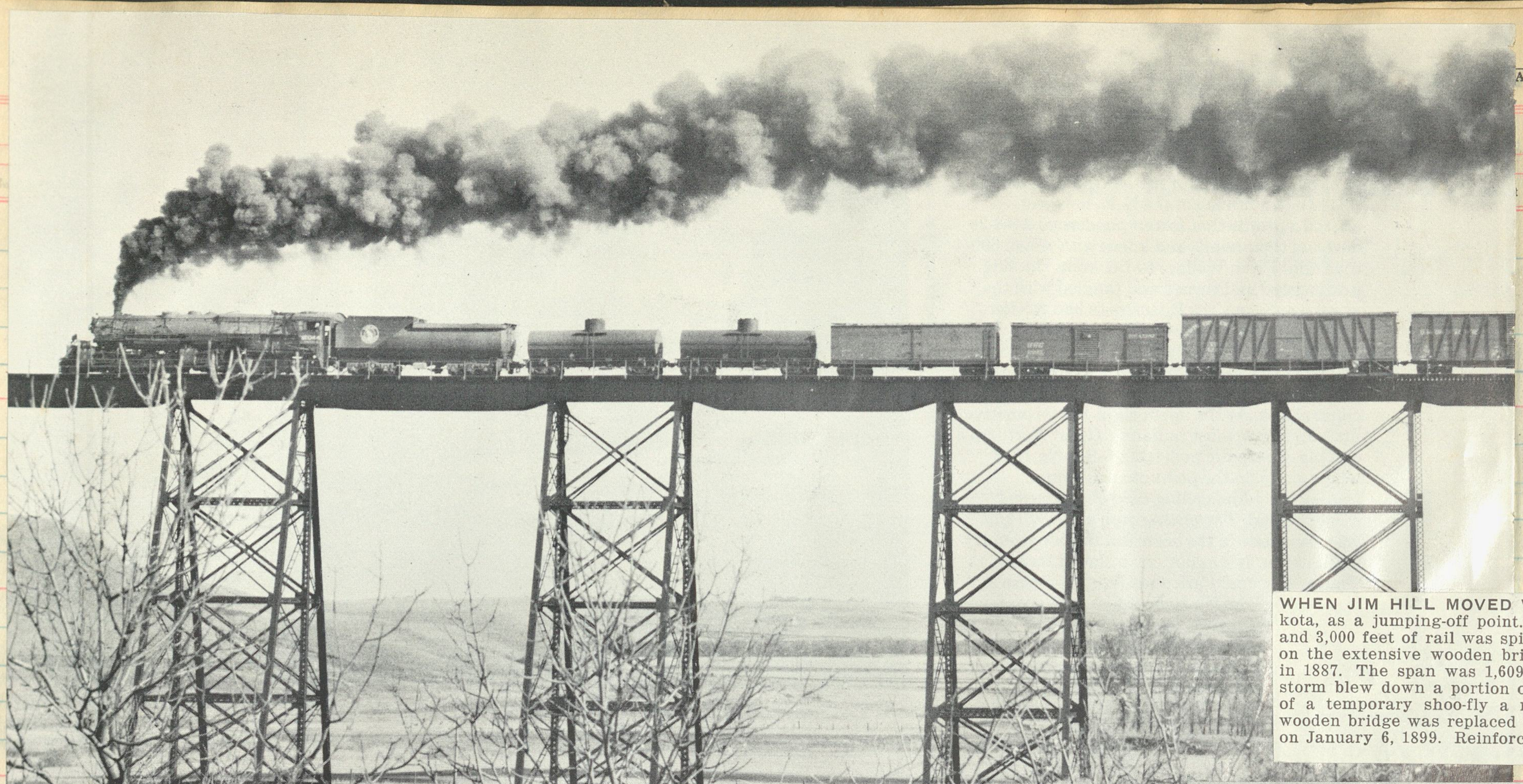
Brooks c/n 2709
Org #382

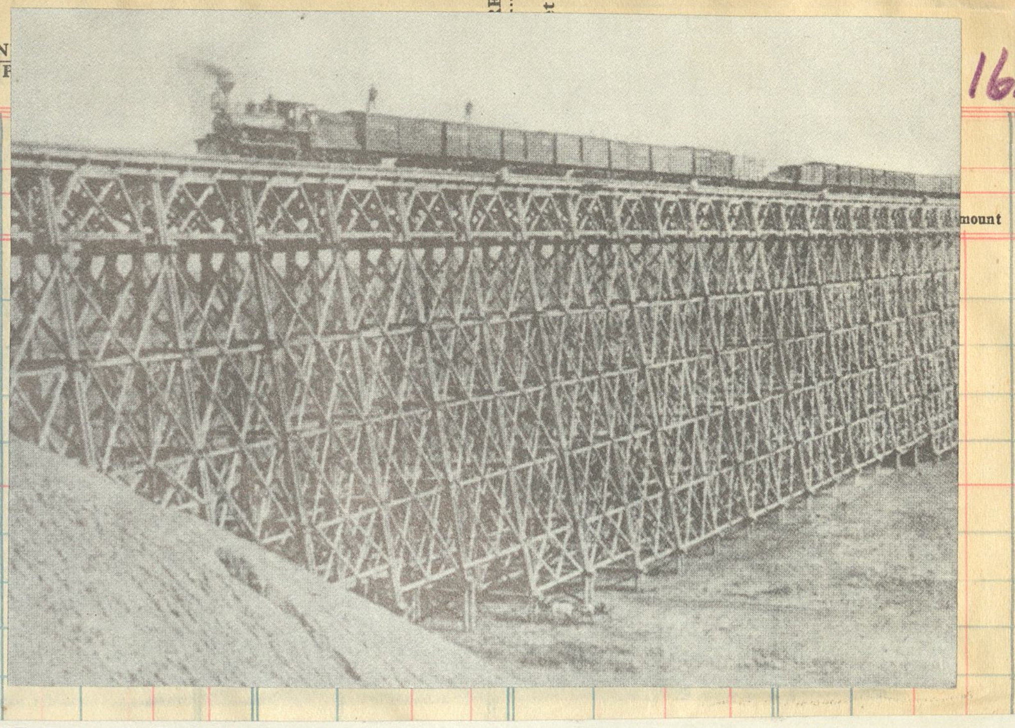
This old Mogul went to work for "Yim Hill" in 1896, 45 years on the job and ready for another day at Minot.



Sold to Montana Western #5 in 1950

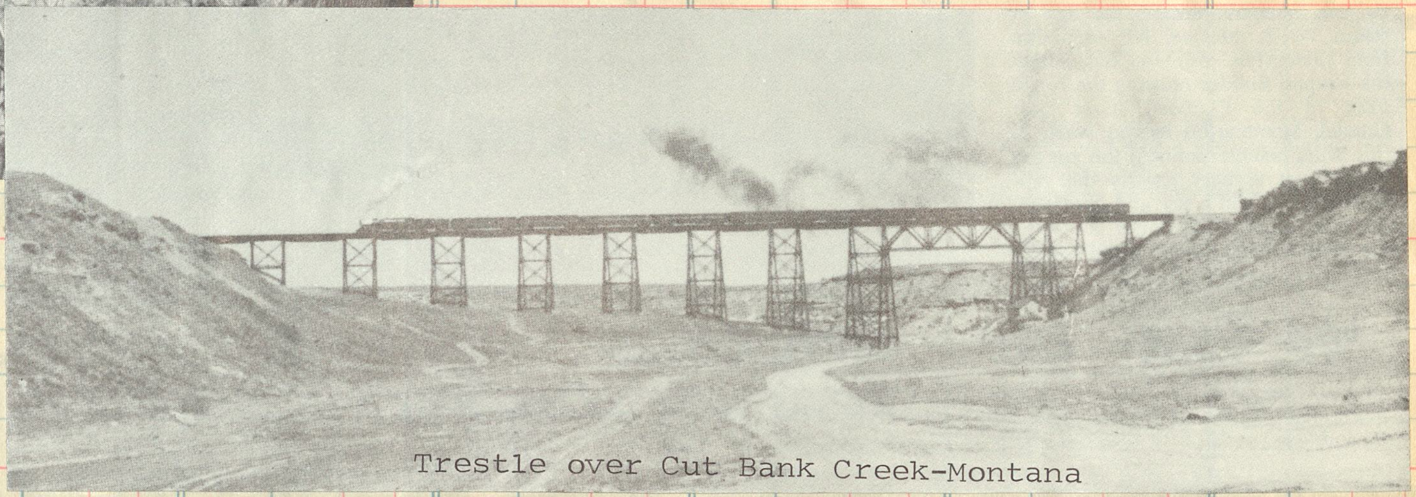
**A HALF CENTURY OLD** when this photo was taken in 1941, Class F-1 Consolidation, an 1892 graduate of the Brooks Works, provides the power for the Neihart local out of Great Falls, Montana. This ancient little kettle, that once ran in the Cascades, had been progressively downgraded through the years until it is now used for the lightest of way freight work. (W. R. McGee)



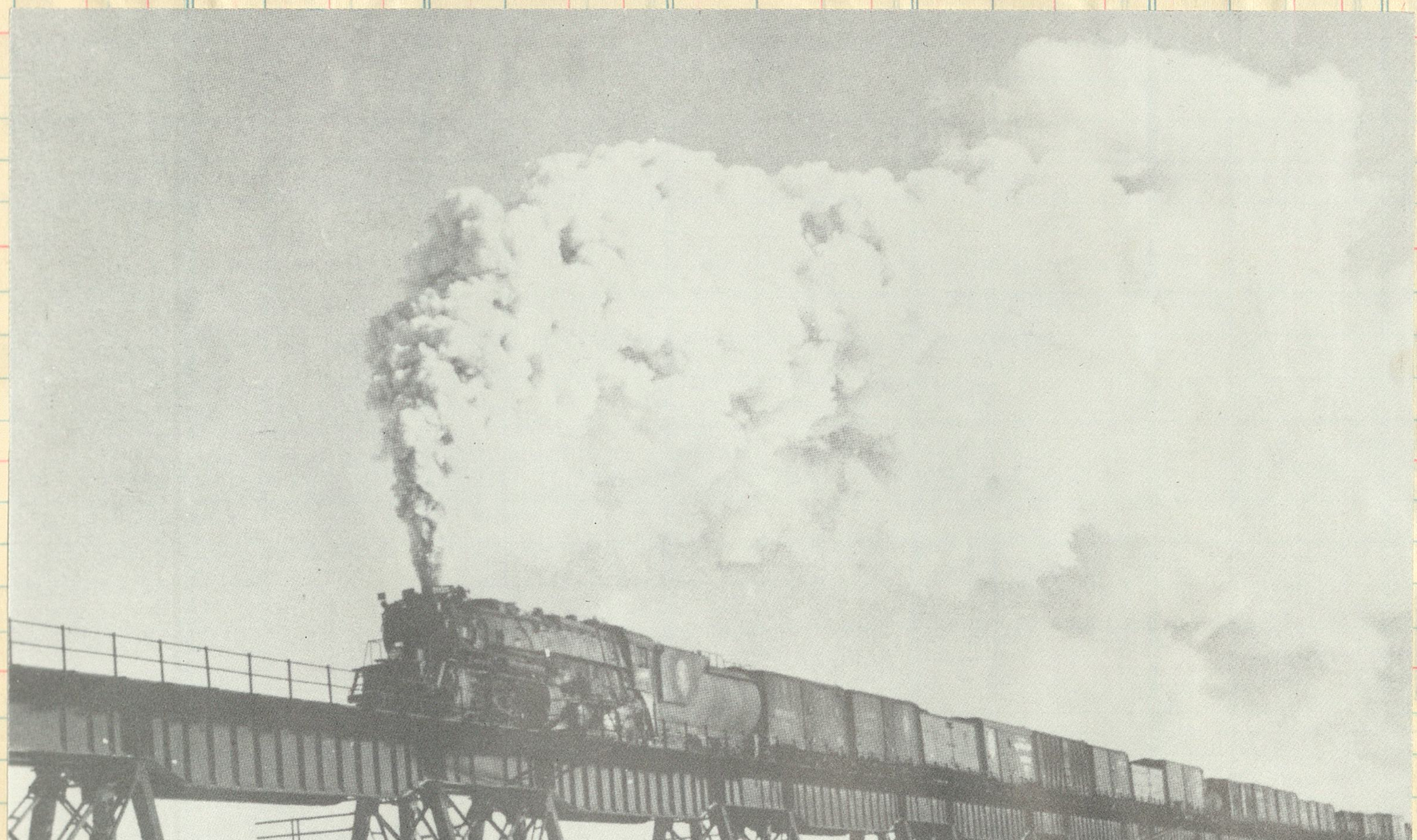


**WHEN JIM HILL MOVED WEST,** his St. Paul, Minneapolis & Manitoba Railway used the terminal at Minot, North Dakota, as a jumping-off point. Track laying on the extension to the Pacific Coast was started at Minot on April 2, 1887, and 3,000 feet of rail was spiked home on the first day. About three miles west of Minot, the road crossed Gassman Coulee on the extensive wooden bridge shown here. Work on this structure was started in 1886 and the job was completed early in 1887. The span was 1,609 feet long, 102 feet high, and contained 1,303,998 feet of timber. On August 14, 1898, a wind storm blew down a portion of this wooden bridge and the Great Northern trains were routed around the break by means of a temporary shoo-fly a mile and one-half long that ran down into the coulee. While this detour was in use, the wooden bridge was replaced with a steel span 1,792 feet long and 117 feet high, the new structure being opened to traffic on January 6, 1899. Reinforced in the winter of 1923-24, it continues to serve the Great Northern well.

(Courtesy of Great Northern Railway)

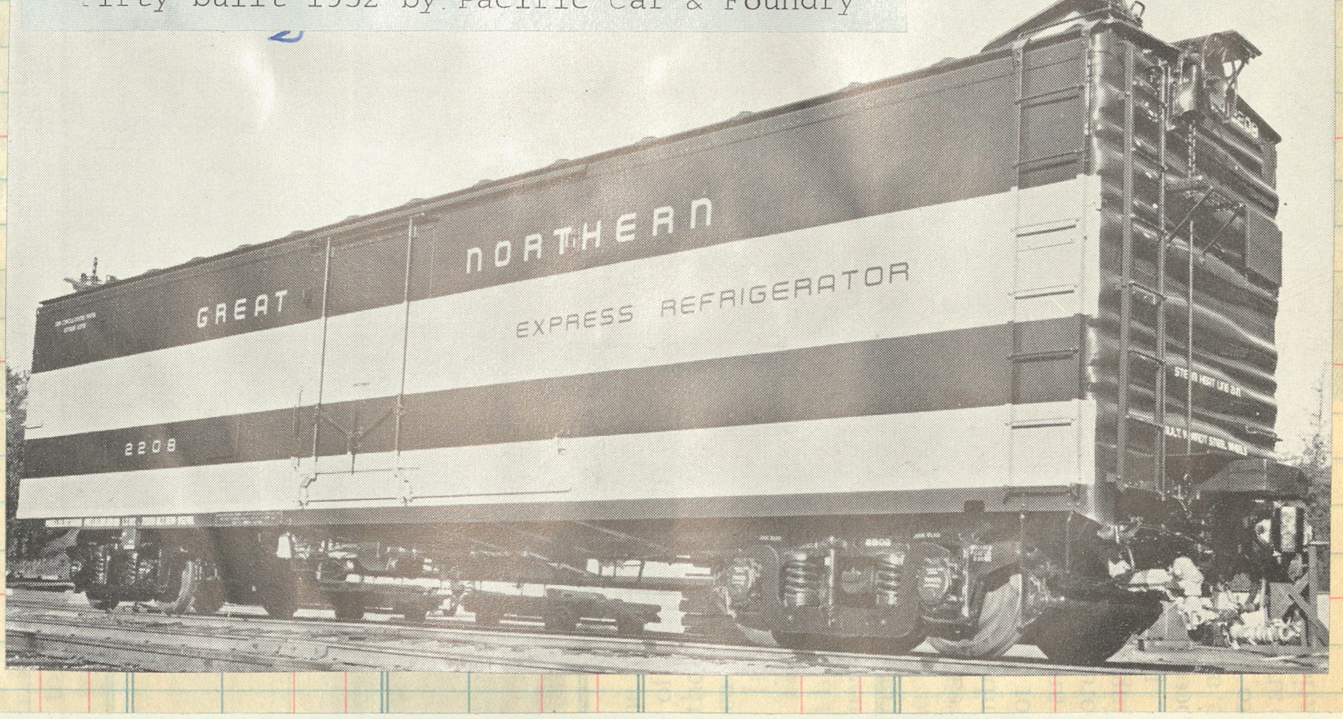


Trestle over Cut Bank Creek-Montana

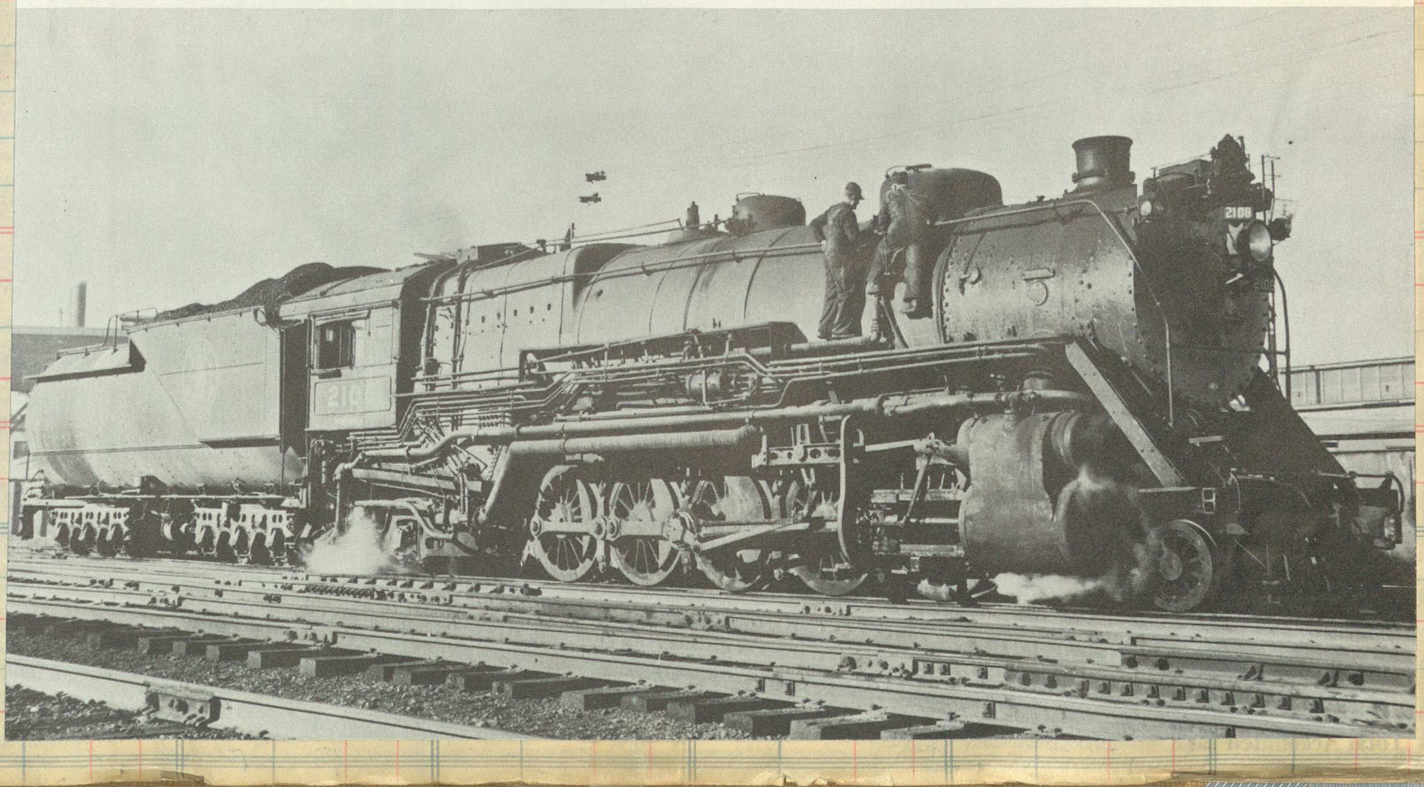


**A MONSTROUS R-2 CLASS 2-8-8-2** with its all weather cab buttoned up tight in the below zero weather exhausts heavily while on the point of a westbound freight. Just west of Minot, on the 3rd subdivision of the Minot Division is Gasman Coulee Bridge, one of the most spectacular structures on the mainline. 1,792 feet long and 117 feet high, it was put into service in 1899, and heavily re-inforced in 1923/24 to handle the bigger power being delivered to the GN. (Casey Adams)

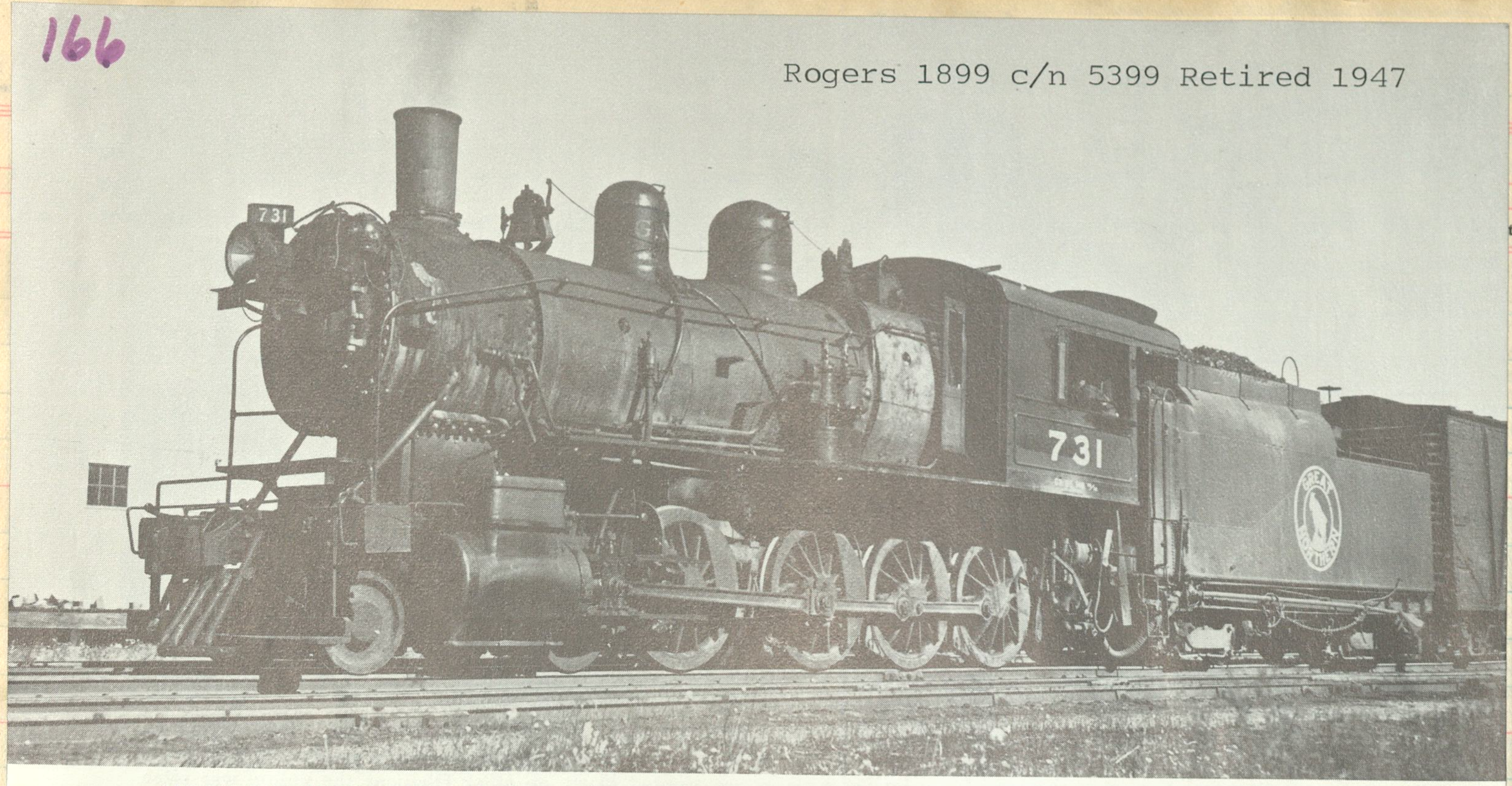
Fifty built 1952 by Pacific Car & Foundry



**COAL BURNING 2-10-2** No. 2108, one of the Q-1 class has been called for an assignment and at almost the last moment it has been discovered that the sander valves are stuck. Help has arrived and the two mechanics, after a brief consultation about the vagaries of sander valves, and 2108's in particular, the valves are being freed. No. 2108 will jolt the extra eastbound freight into motion as called. (Casey Adams)



Rogers 1899 c/n 5399 Retired 1947

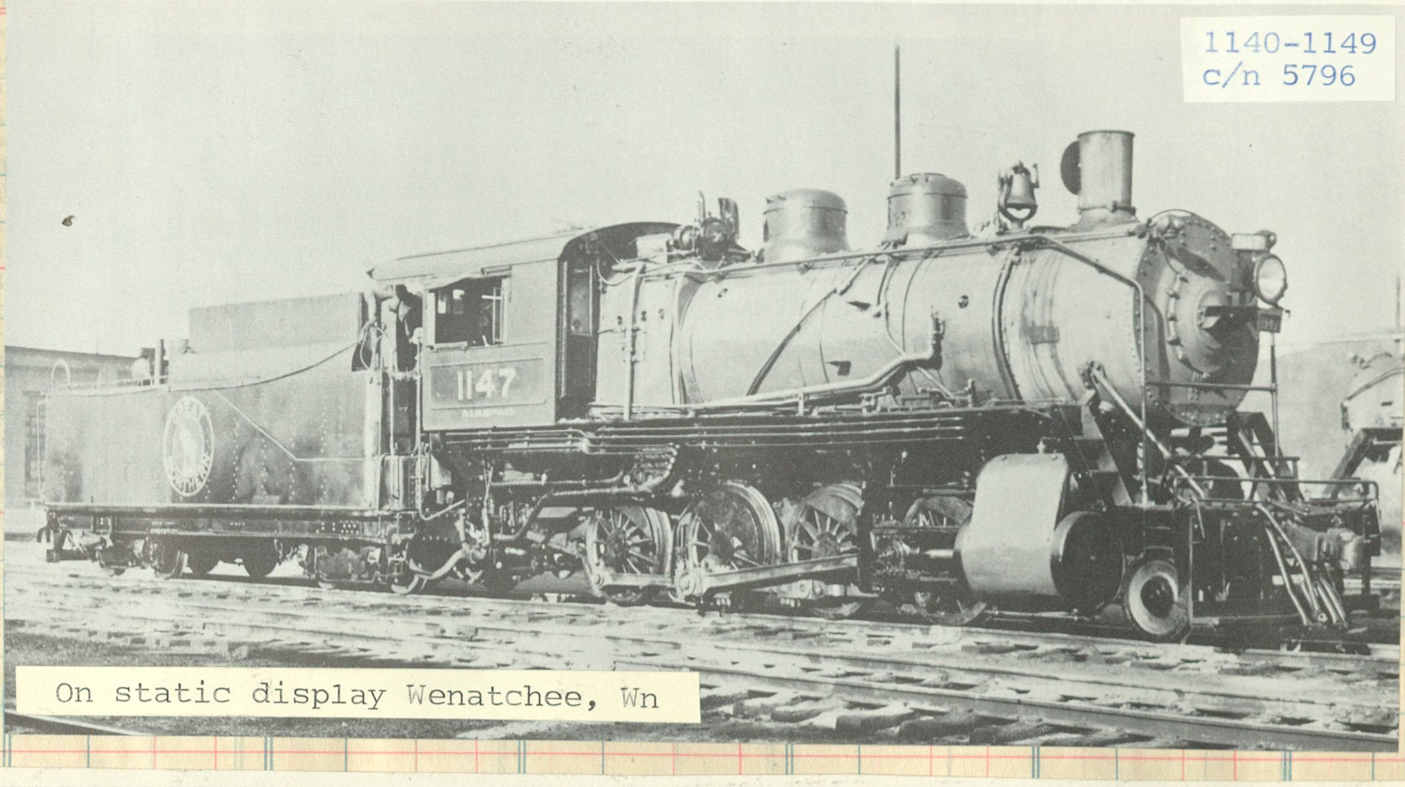


**55″ DRIVERED TWELVE WHEELERS (4-8-0's)** were widely used on the GN just after completion of the mainline in 1893. 105 of them were ordered from Brooks and Rogers Locomotive Works between 1891 and 1900. Divided into five sub-classes, the Class G locomotives were heavy freight and pusher power for a number of years in the Cascades. As heavier and more powerful types entered service in the Pacific Northwest, the twelve wheelers began to appear in increasing numbers on the Dakota and Willmar Divisions. The Butte Division also operated a number of the class during World War II, and 8 of the original 105, were still in standby service as late as 1950. (Casey Adams)

**CLASS F-8 CONSOLIDATION NO. 1147,** built by Rogers in 1903, has received class I repairs at Hillyard in 1950 and is being prepared for duty again. The electrician on the tender is reconnecting the electric conduit that carries power for the back-up light mounted on the tank.

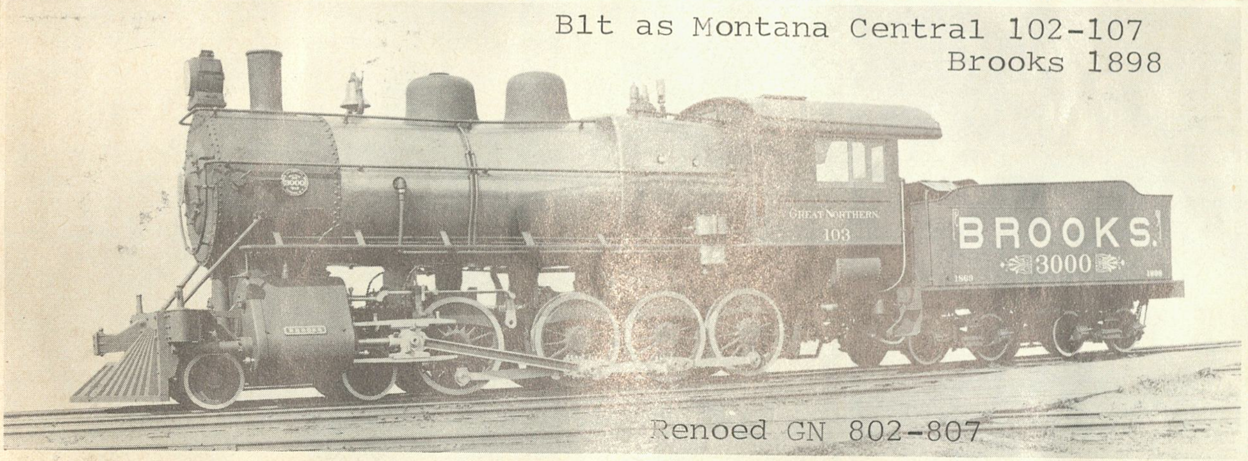
This particular class of engine was used as standard freight power in the Cascades for years with the big Class L Mallets assisting as pushers and helpers. Capable of a fair turn of speed, the Consolidations also helped in passenger service. Good uncomplicated serviceable power, developing a tractive effort of around 49,000 lbs. and mounted on 55″ drivers, the Consolidations were purchased in large numbers by the GN shortly after the turn of the century, and as late as 1950, 36 of the Class F-8's were still on the active roster. (Wally Swanson)

1140-1149
c/n 5796



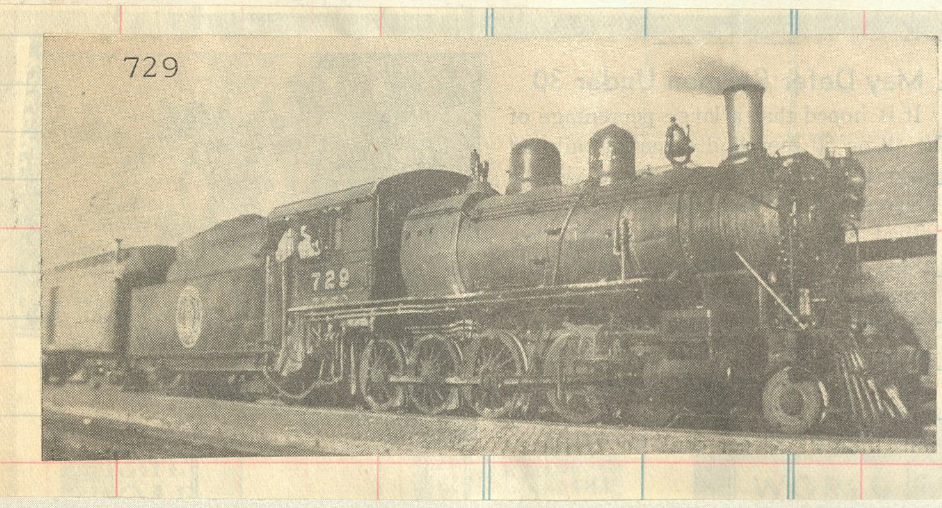
On static display Wenatchee, Wn

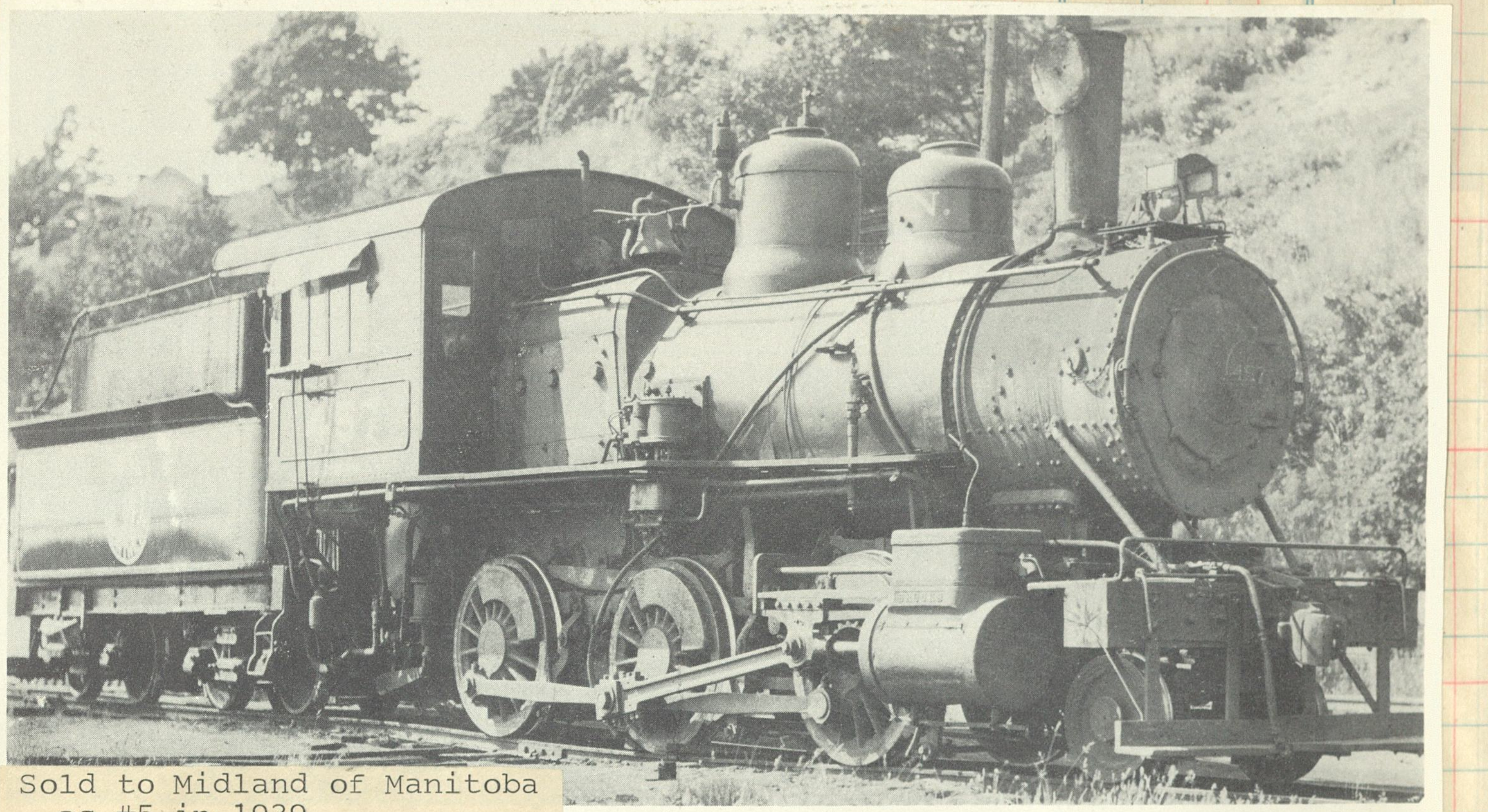
Blt as Montana Central 102-107
Brooks 1898



Renoed GN 802-807

729





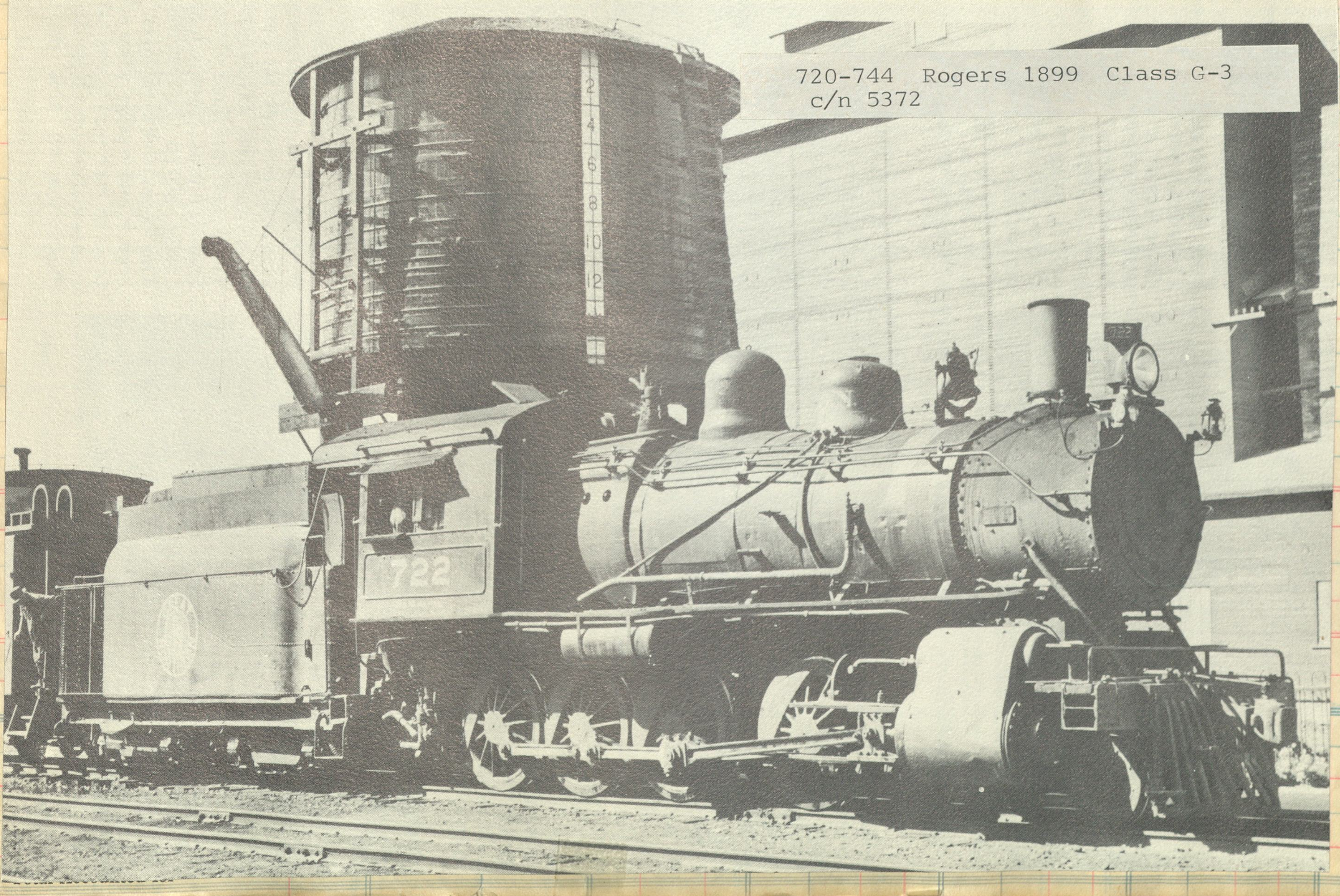
Sold to Midland of Manitoba
as #5 in 1939

**GREAT NORTHERN RAILWAY** **NO. 457**

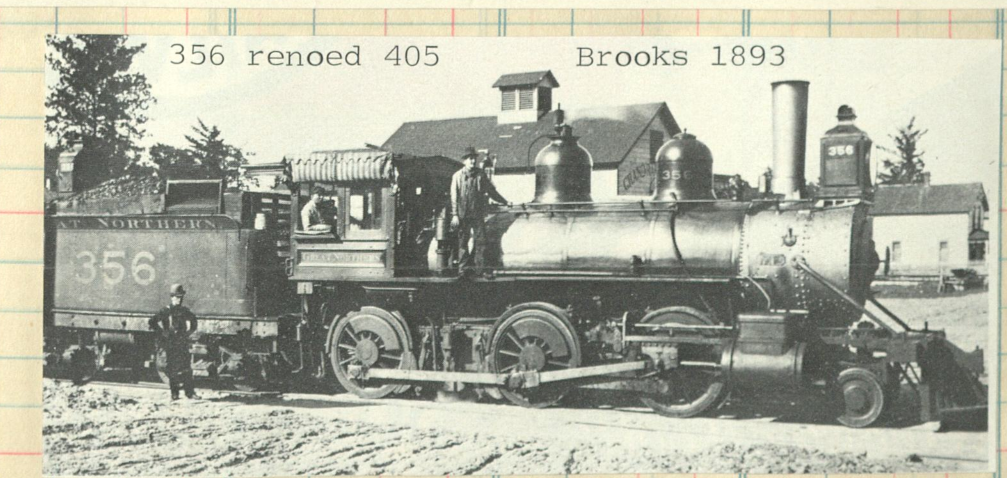
An 1896 vintage engine built by the Brooks Works. Road class D-5, Boiler Pressure 180 lbs., 55" drivers, and 19" x 26" cylinders. Original number 378, renumbered in 1899, Bldr's number 2705. The Belpaire firebox shows clearly in this photo taken at Bellingham, ~~Minn.~~ Wash. in 1934. Scrapped in 1939. Great Northern Photo.

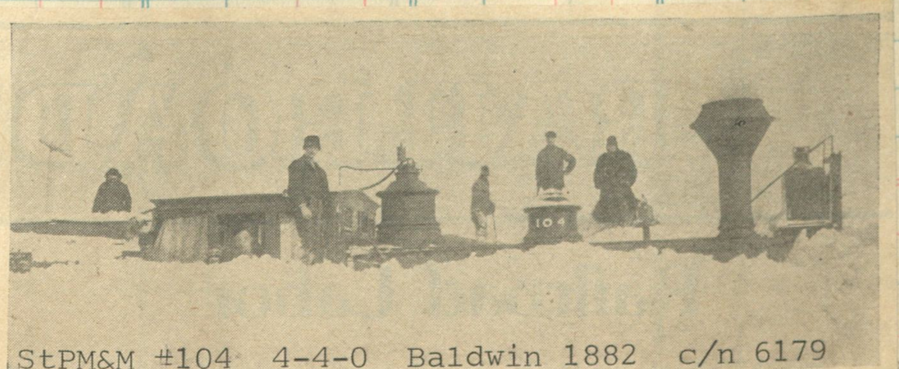
16

720-744 Rogers 1899 Class G-3
c/n 5372



356 renoed 405 Brooks 1893





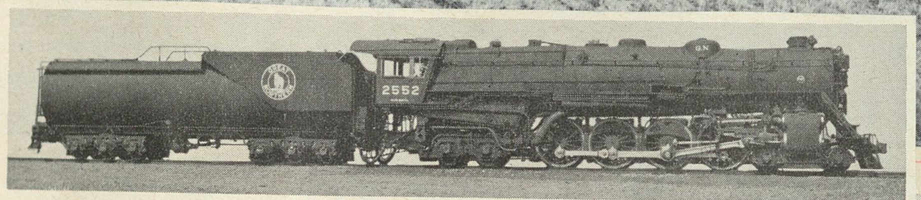
StPM&M #104 4-4-0 Baldwin 1882 c/n 6179

Ethel Parker

SNOWSTORM ON THE GREAT NORTHERN RAILROAD IN 1892

The joys (?) of winter railroading are indicated in this photo taken in March 1892 about one-half mile west of McIntosh, Minn., where G. N. Engine 104 needed some plain and fancy digging out.

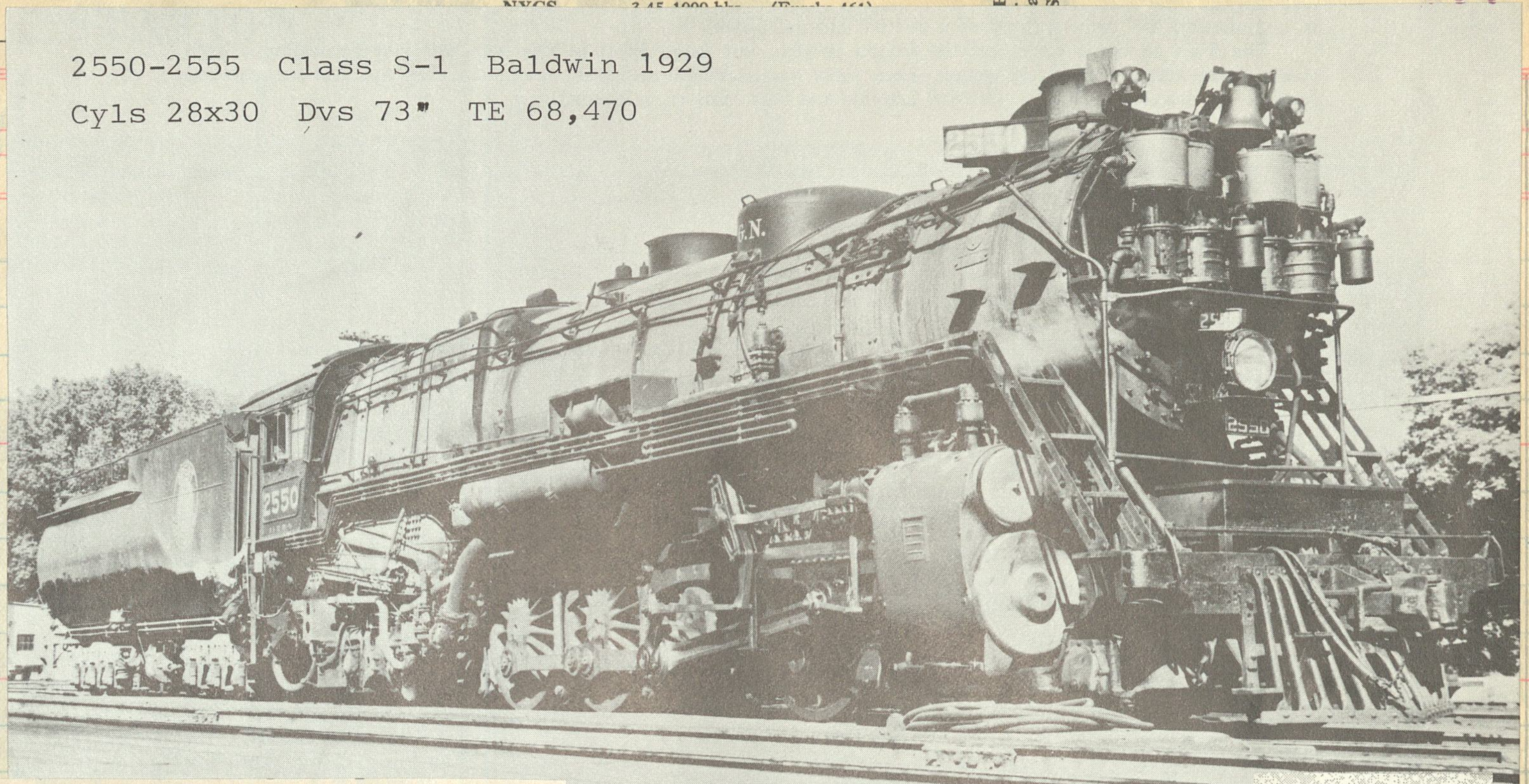
167



Collection of H. L. Broadbelt

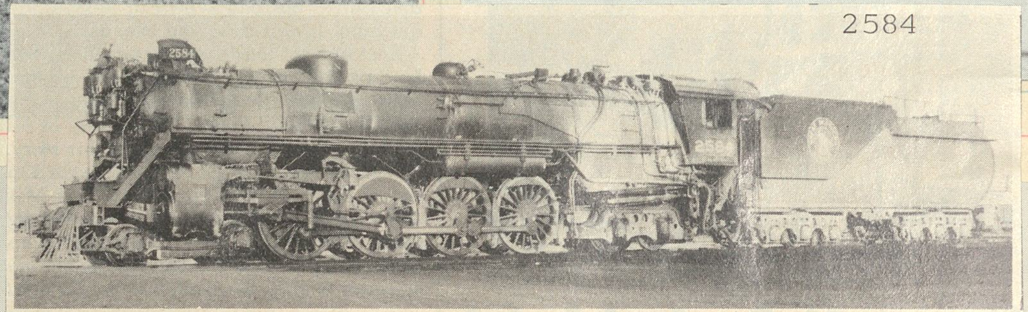
S-1 2552 with tonnage near Olney, Montana

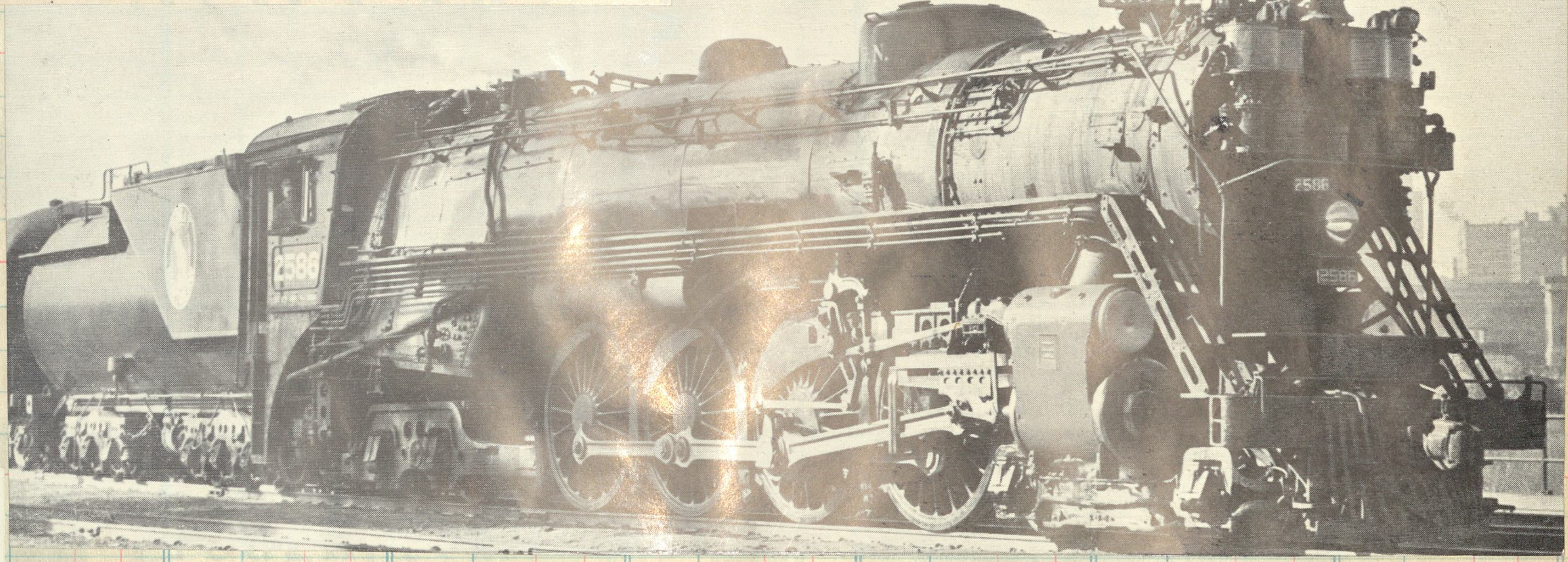
2550-2555 Class S-1 Baldwin 1929
Cyls 28x30 Dvs 73" TE 68,470



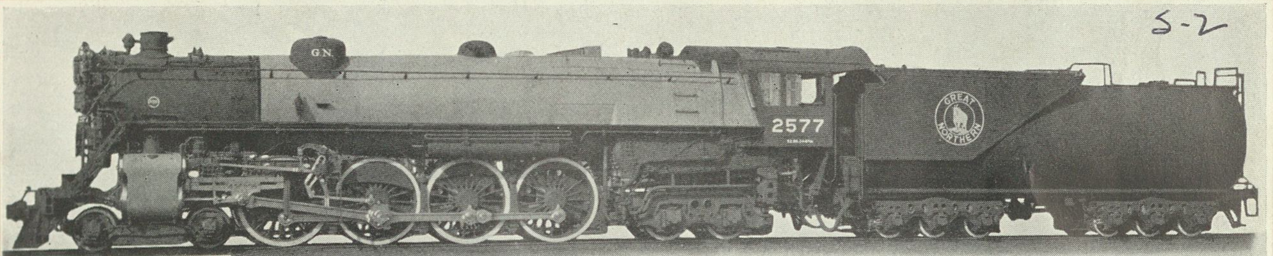
c/n 60781

2584





S-2



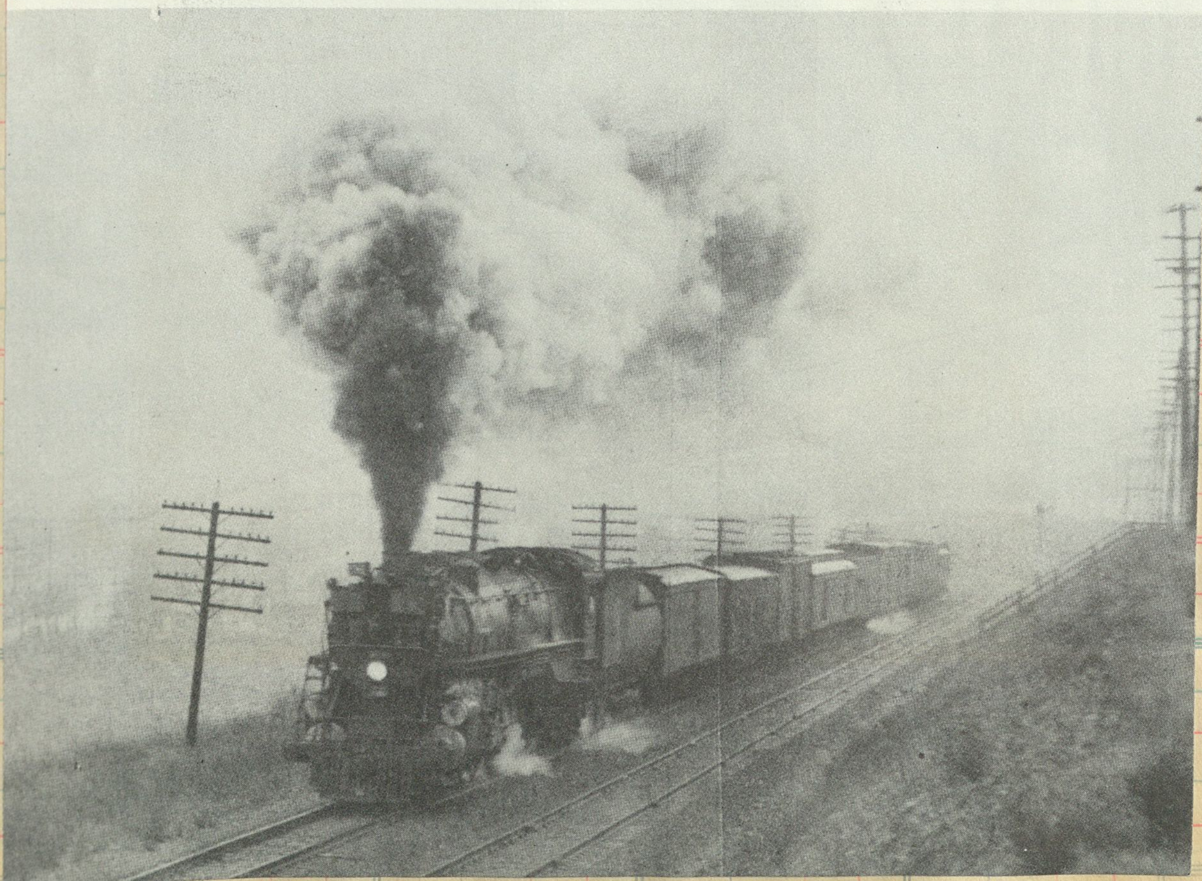
2575-2588
c/n 61213

Baldwin 1930

**4-8-4 Type Locomotive, Class S-2, Great Northern Railway**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cylinders | 29" x 29" | Tubes, number | 3½", 195; 2¼", 38 | Wheel base, driving | 20' 9" | Weight, total engine | 420,900 lb. |
| Drivers, diam. | 80" | " length | 22' 0" | " " total engine | 47' 9" | " " " and tender | 747,800 lb. |
| Boiler, diam. | 84" | Grate area | 97.7 sq. ft. | " " " " and tender | 91' 2" | Tank capacity, water | 17,000 U. S. gal. |
| Steam pressure | 225 lb. | Water heating surface | 4781 sq. ft. | Weight on drivers | 247,300 lb. | " " oil | 5800 U. S. gal. |
| Firebox | 138" x 102" | Superheating surface | 2265 sq. ft. | | | Tractive force | 58,300 lb. |
| Tubes, diam. | 3½" & ¼" | | | | | | |

**NO. 2585** is feeling a heavy hand from the hogger as the high stepping 80" drivered Northern comes booming up the 1% grade from the Spokane River Valley towards Hillyard. This Christmas mail extra is running as 2nd Number 4 and only a few signal blocks behind the first section. (Dr. Philip R. Hastings)



On static display at Harve, Mont.

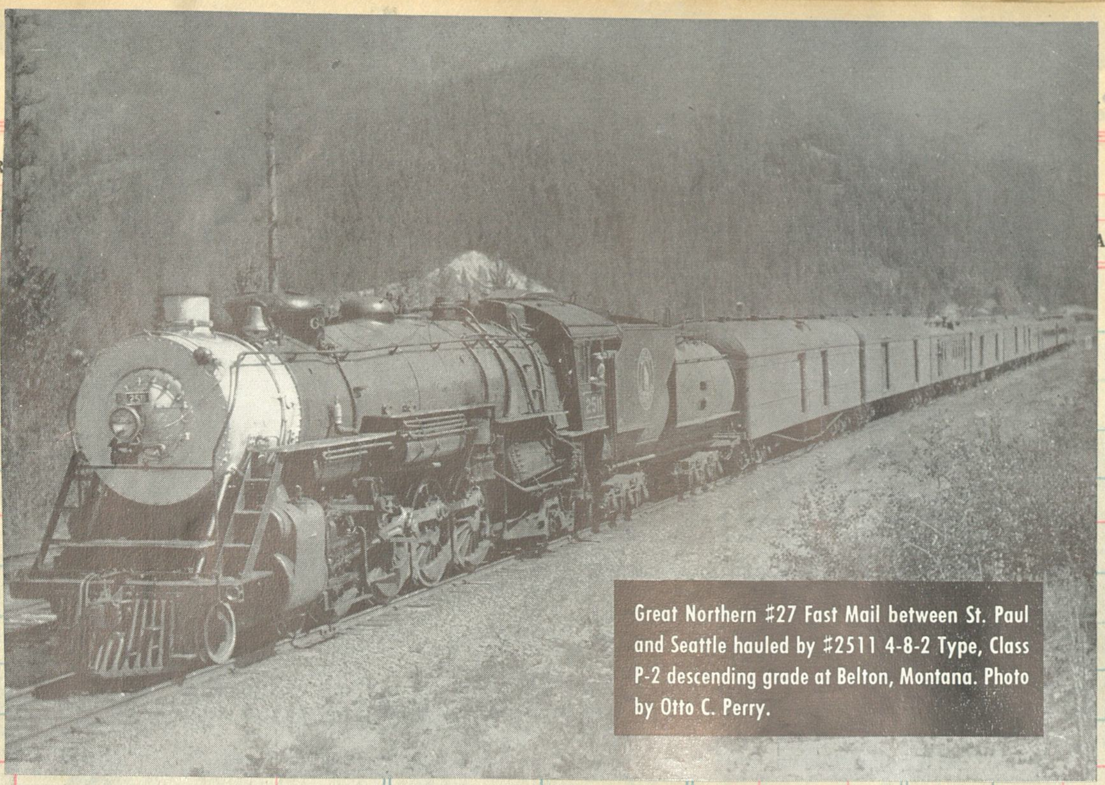
168

System

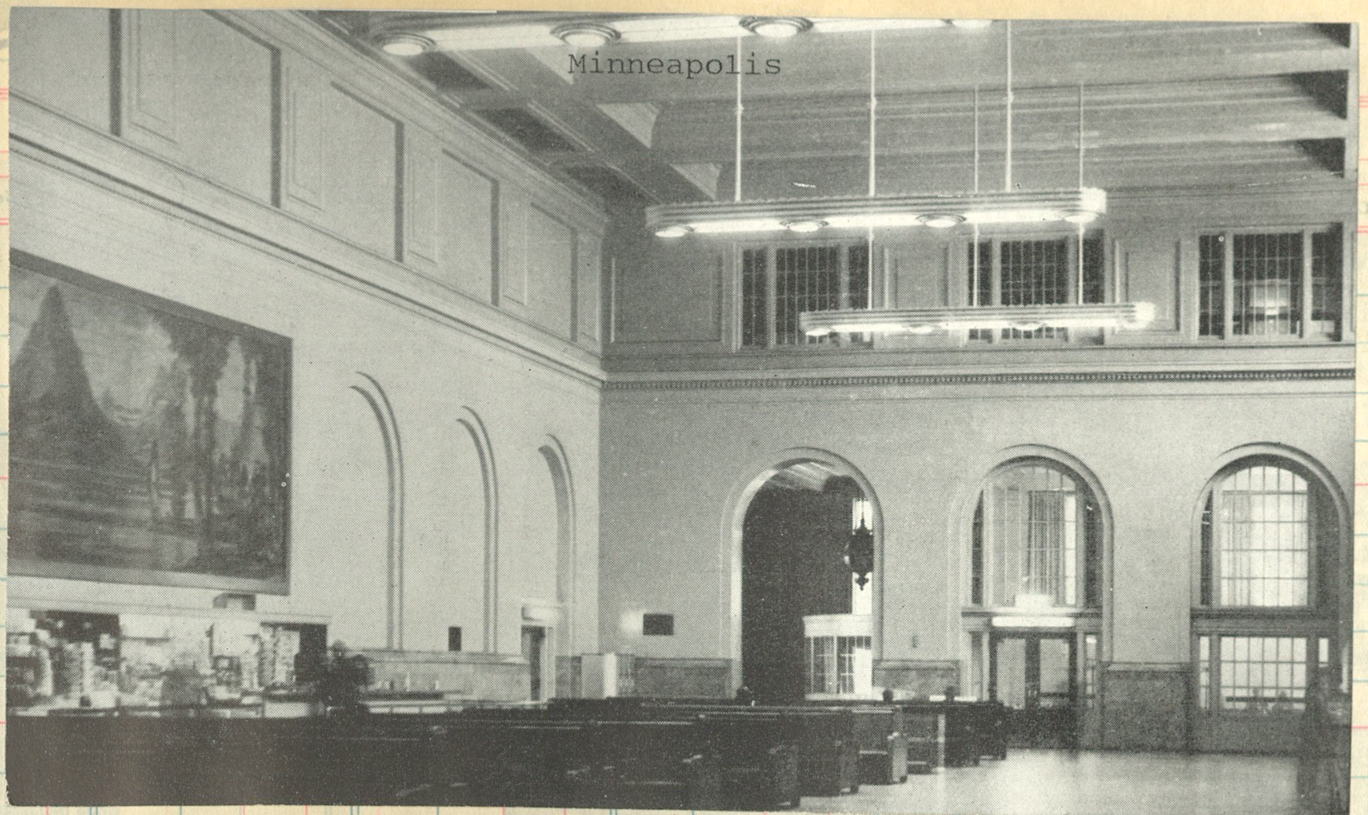
SELLER
DATE
FORM

Amount Clos. No. Sold

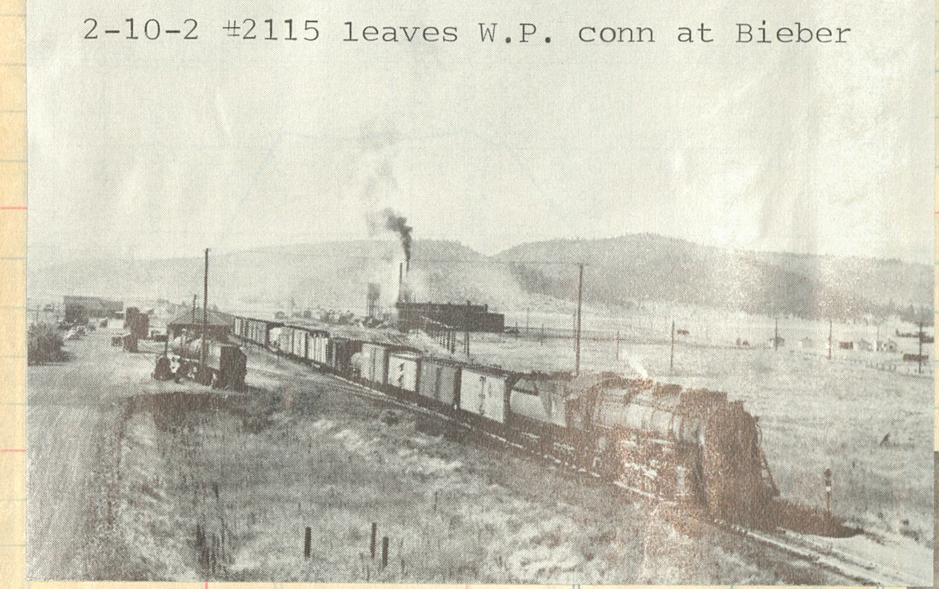
Clos. No. Sold


Great Northern #27 Fast Mail between St. Paul and Seattle hauled by #2511 4-8-2 Type, Class P-2 descending grade at Belton, Montana. Photo by Otto C. Perry.

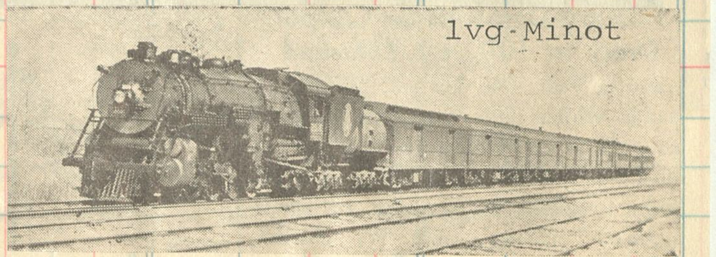
Minneapolis

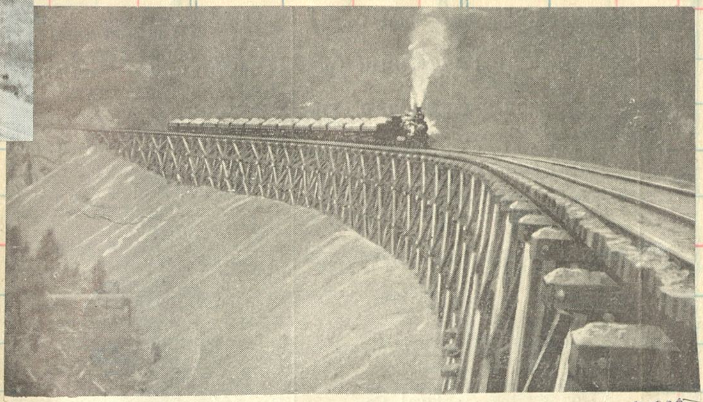


2-10-2 #2115 leaves W.P. conn at Bieber

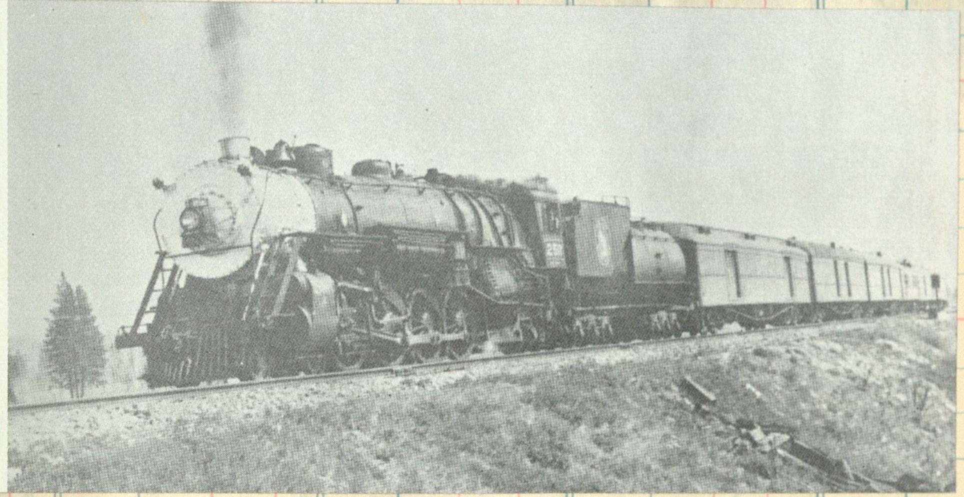


lvg-Minot





**THE MAILMAN** of the Great Northern, The Fast Mail #27, slams through Columbia Falls, Montana behind a white faced P-2 class Mountain. The handsome 4-8-2's were conventional in layout and design, and were not changed much from the day they were built in 1923. They were good engines in the opinion of GN enginemen in either freight or passenger service. Free steaming, easy riding and without bad habits they came about as close to a USRA type as any engine on the "Big G." (W. R. McGee)

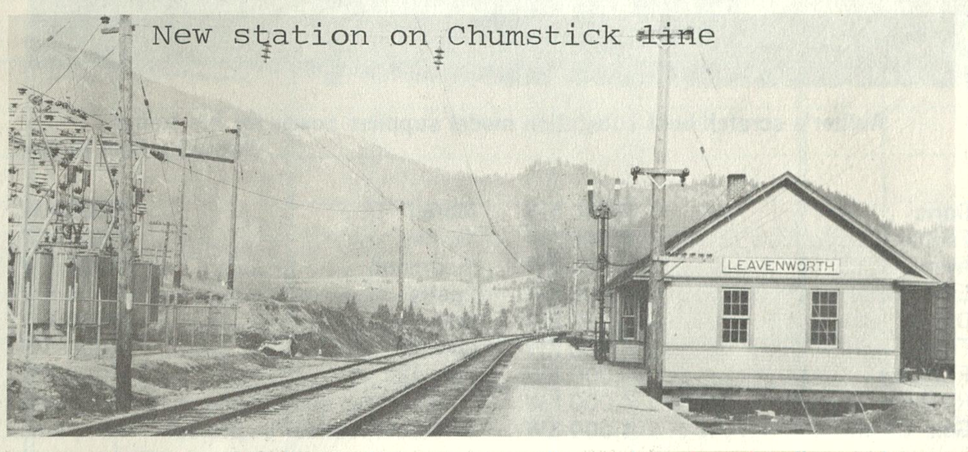


the G.N.Ry. OKM

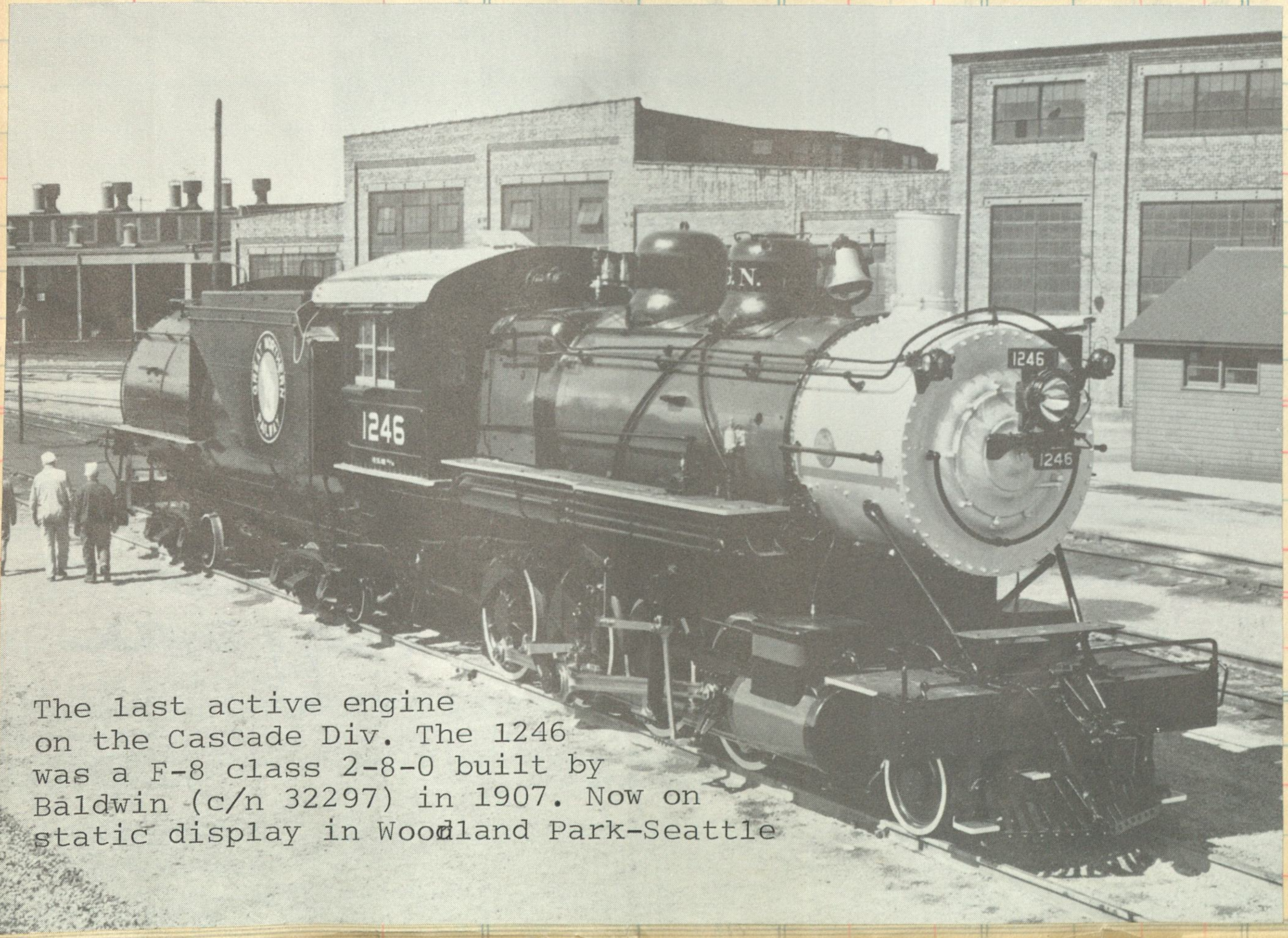
COPYRIGHT BY WISER PHOTO CO. FOR GREAT NORTHERN RAILWAY

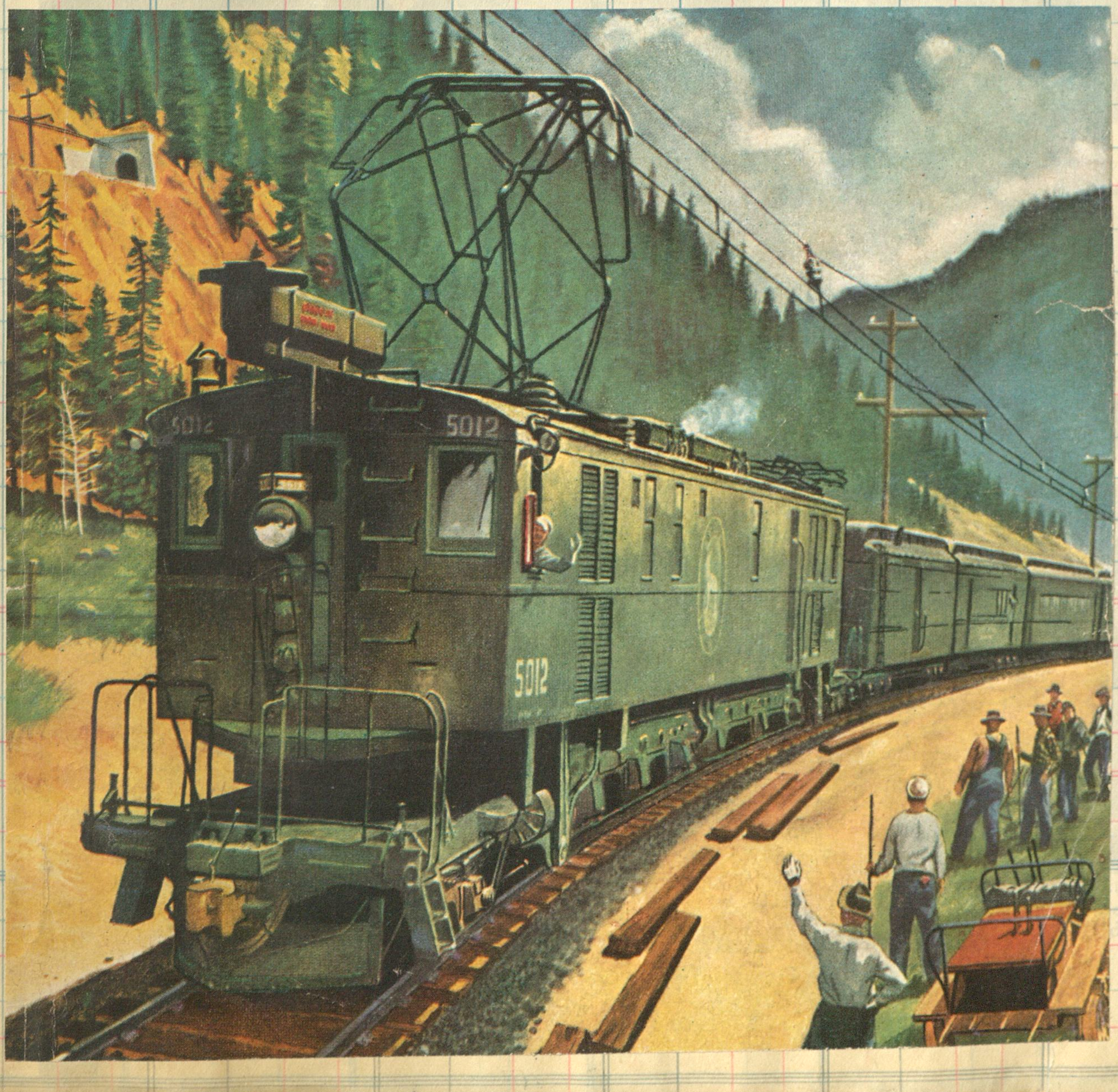
Klickitat Arch, Columbia River OKM

New station on Chumstick line

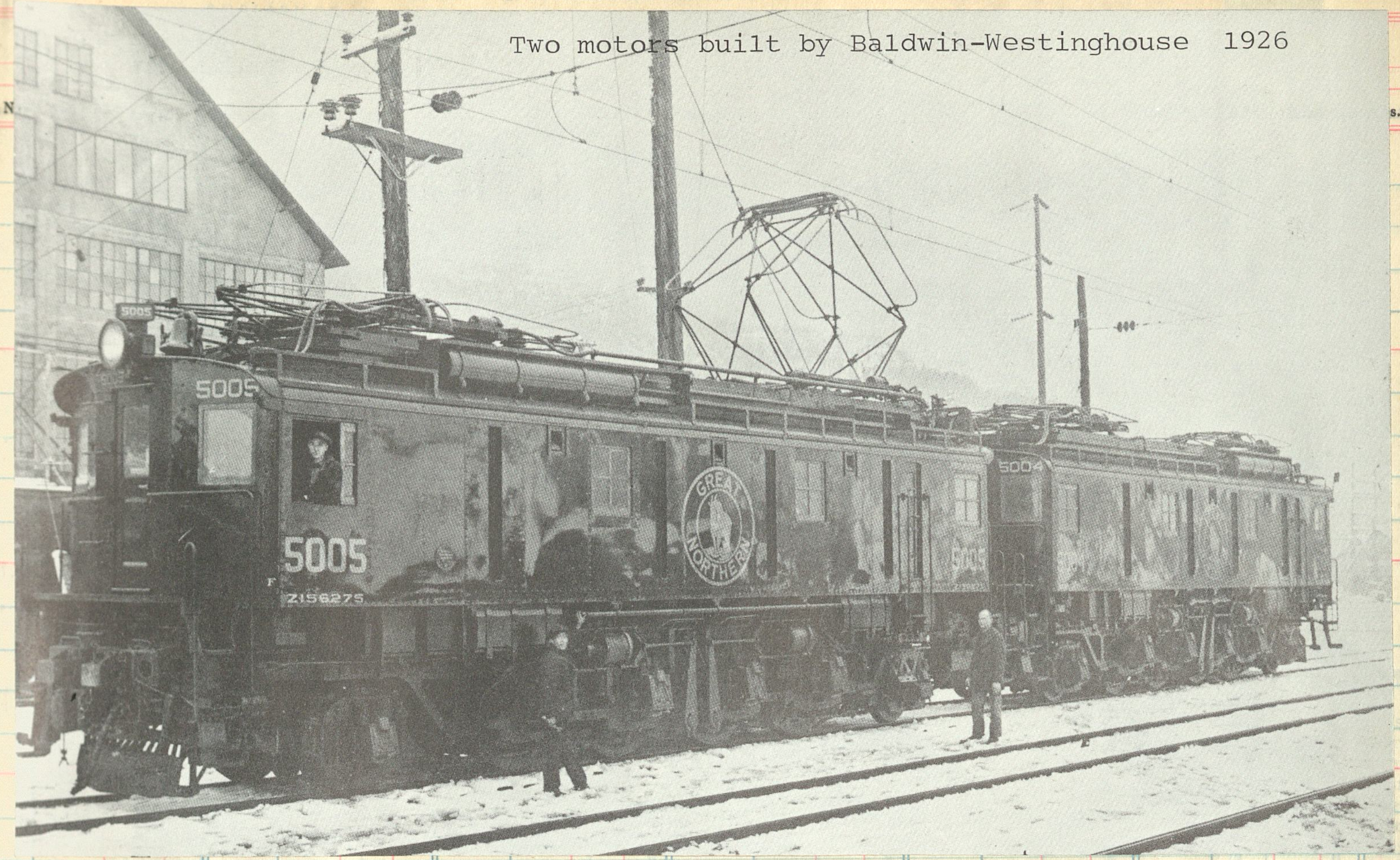


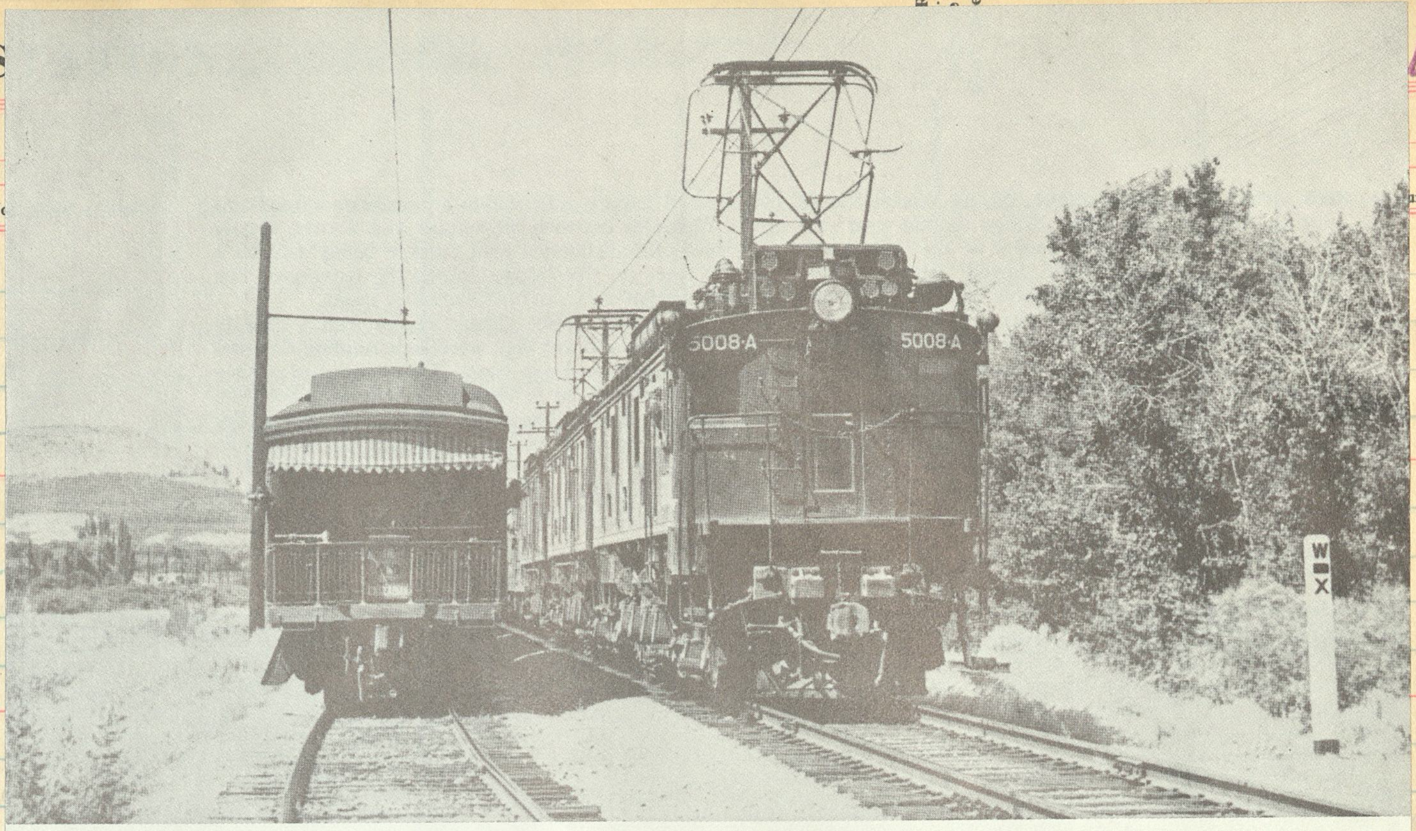
now removed


The last active engine on the Cascade Div. The 1246 was a F-8 class 2-8-0 built by Baldwin (c/n 32297) in 1907. Now on static display in Woodland Park-Seattle



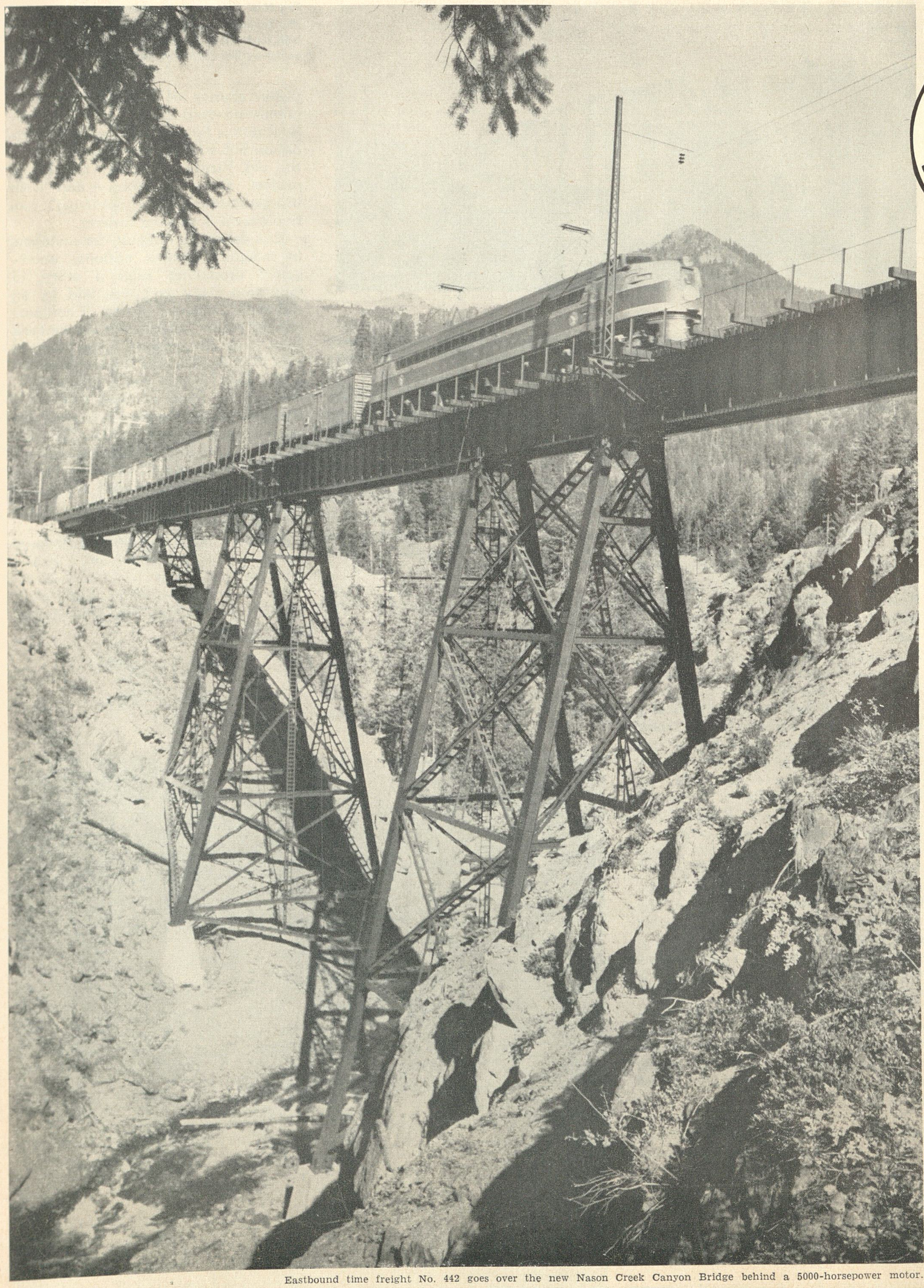
Two motors built by Baldwin-Westinghouse 1926





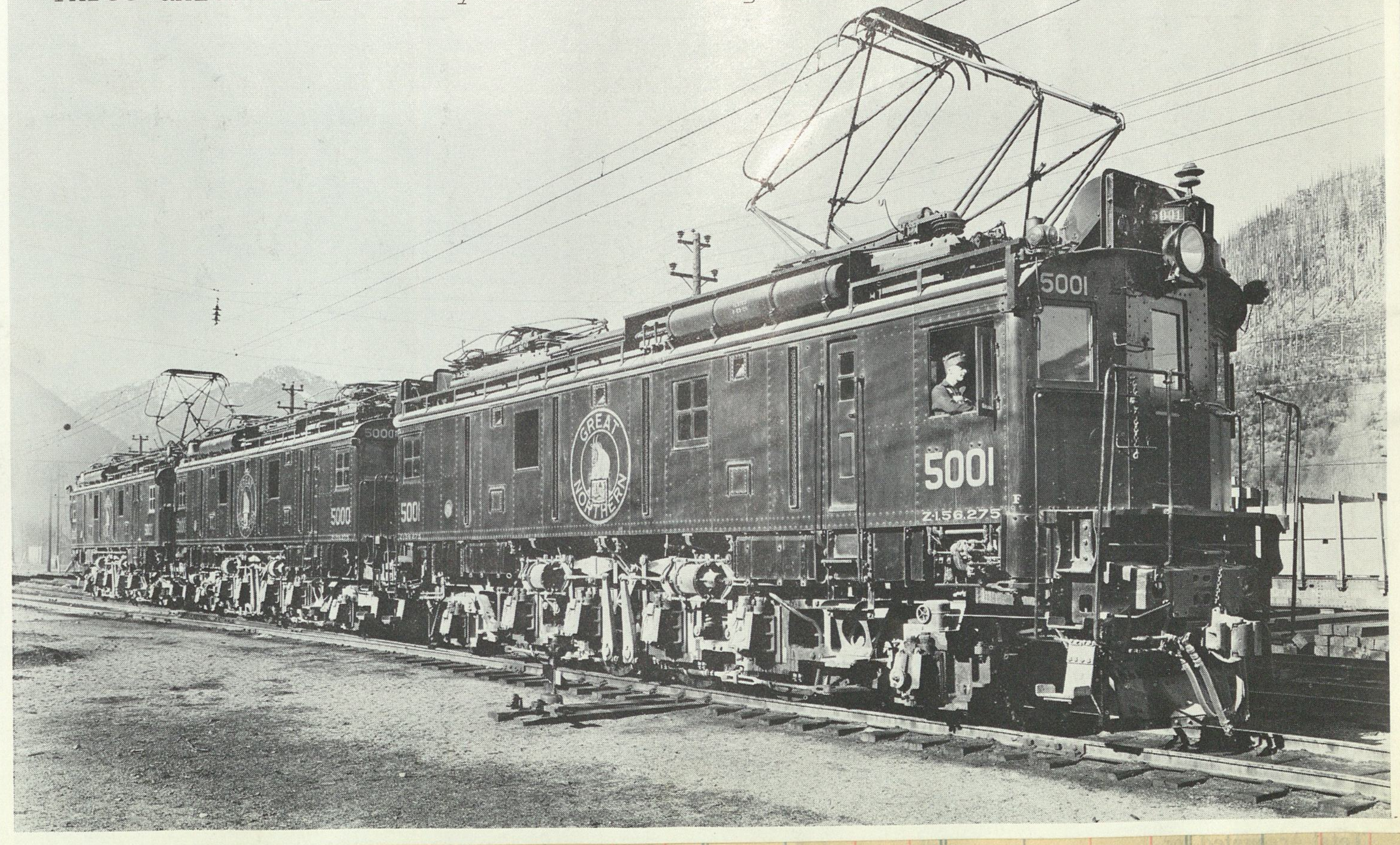
**THE GENERAL OPERATING RULE** of "going in the hole" for the varnish does not necessarily hold true in territory where heavy grades are involved because of the difficulty, delay, and expense incurred in restarting a tonnage freight upgrade. Under these circumstances the dispatcher will usually order the passenger train (varnish) into the siding (hole) and let the freight (drag) continue to power its way upgrade without pause. The Cascadian (Seattle-Spokane local) shown here has taken the siding in deference to the tonnage somewhere around Dryden or Cashmere, Washington just to the west of Wenatchee.

East of Skykomish

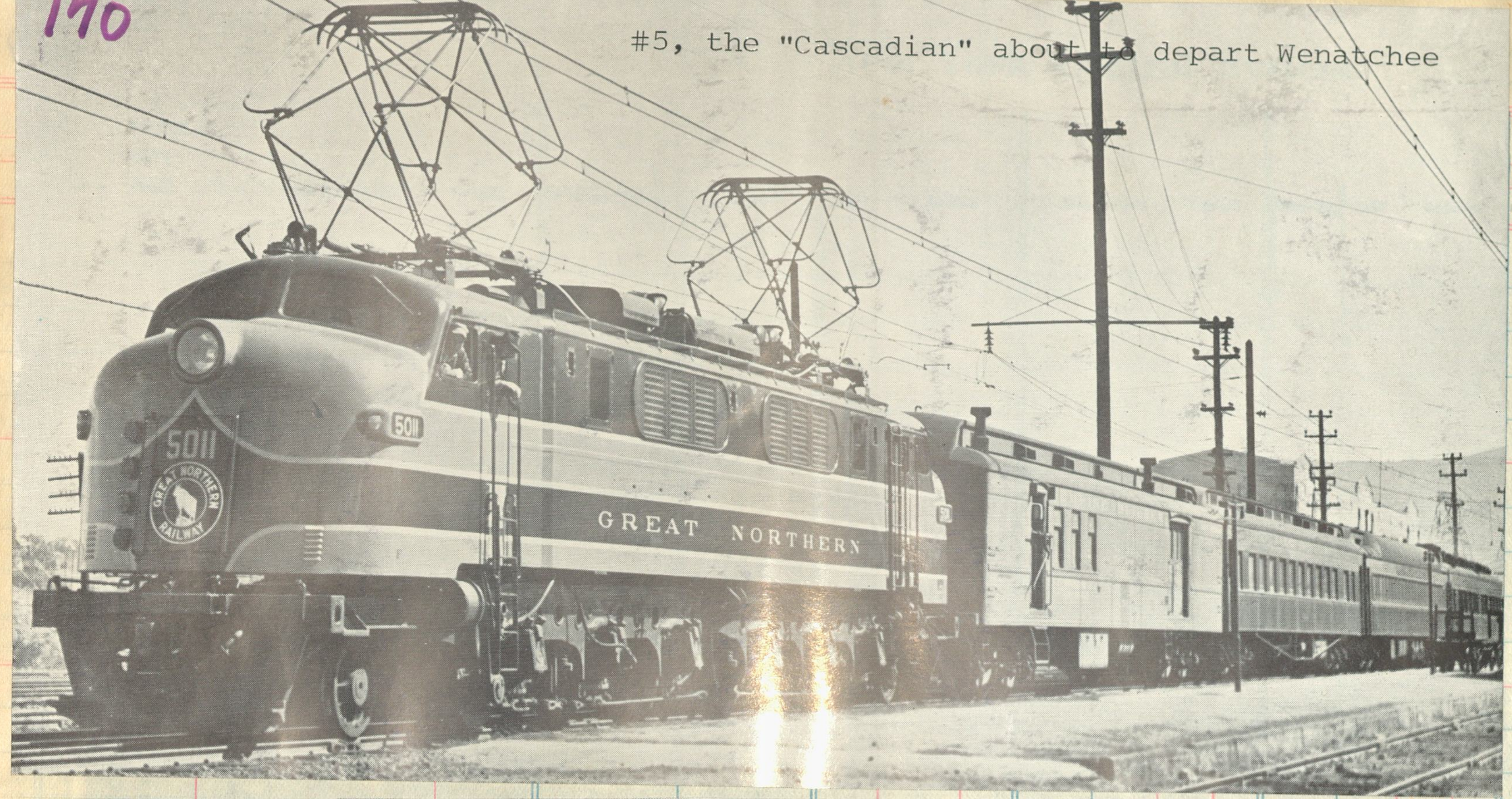


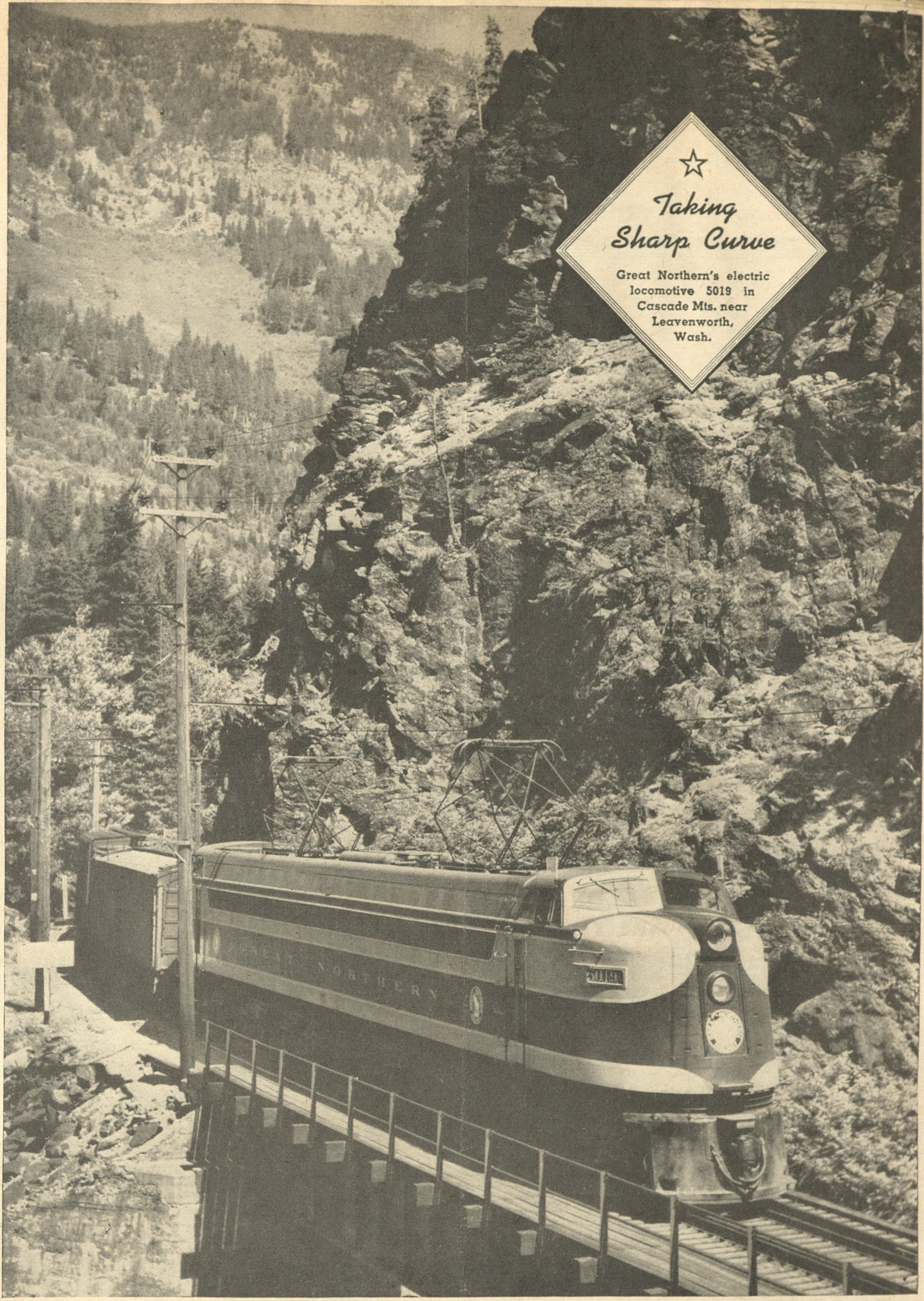
Eastbound time freight No. 442 goes over the new Nason Creek Canyon Bridge behind a 5000-horsepower motor.

Three units delivered by Baldwin-Westinghouse 1928

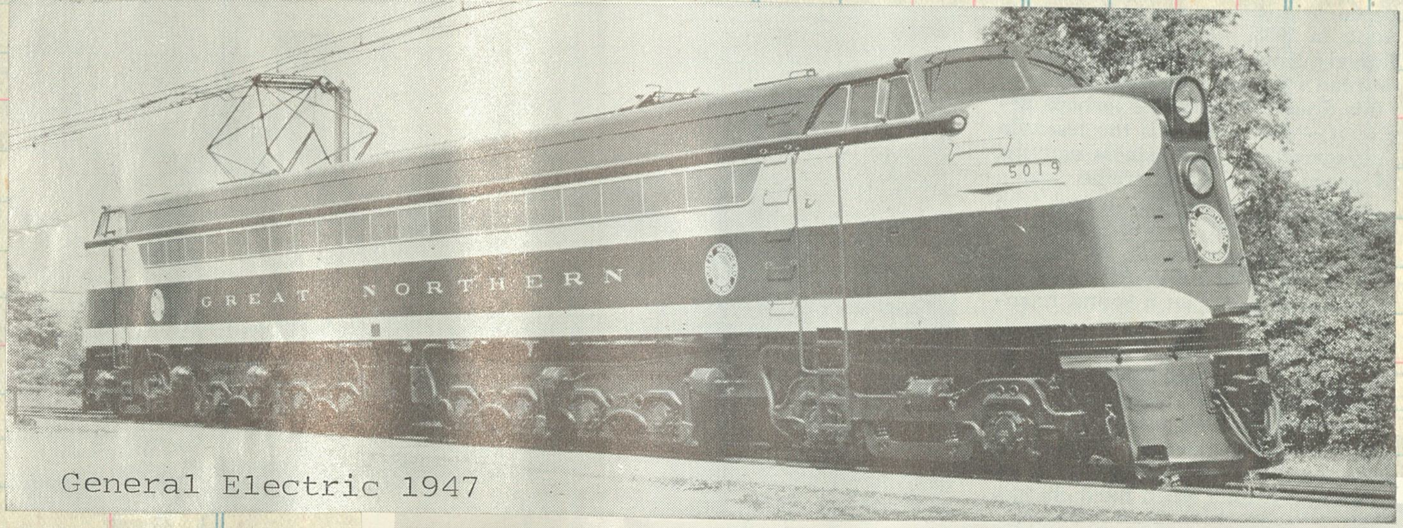


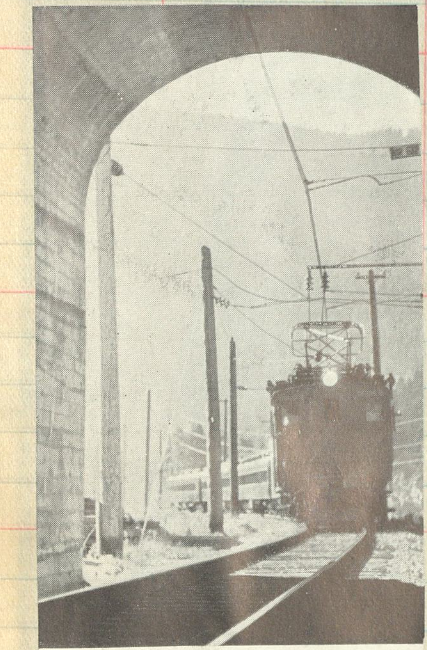
170


#5, the "Cascadian" about to depart Wenatchee


*Taking Sharp Curve*

Great Northern's electric locomotive 5019 in Cascade Mts. near Leavenworth, Wash.

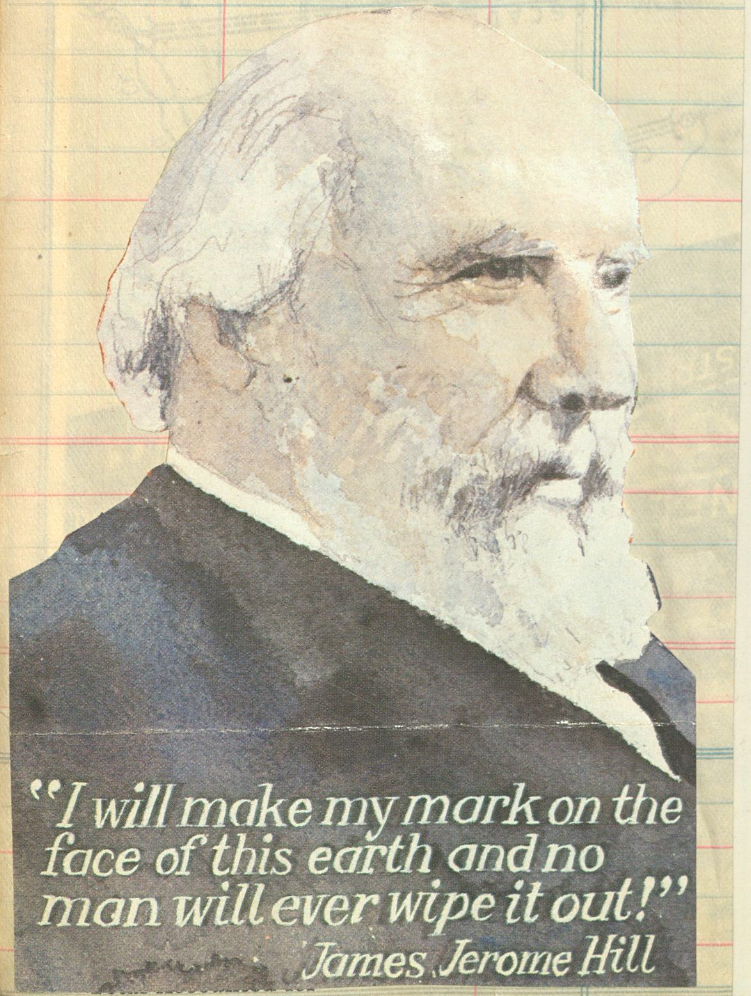

General Electric 1947

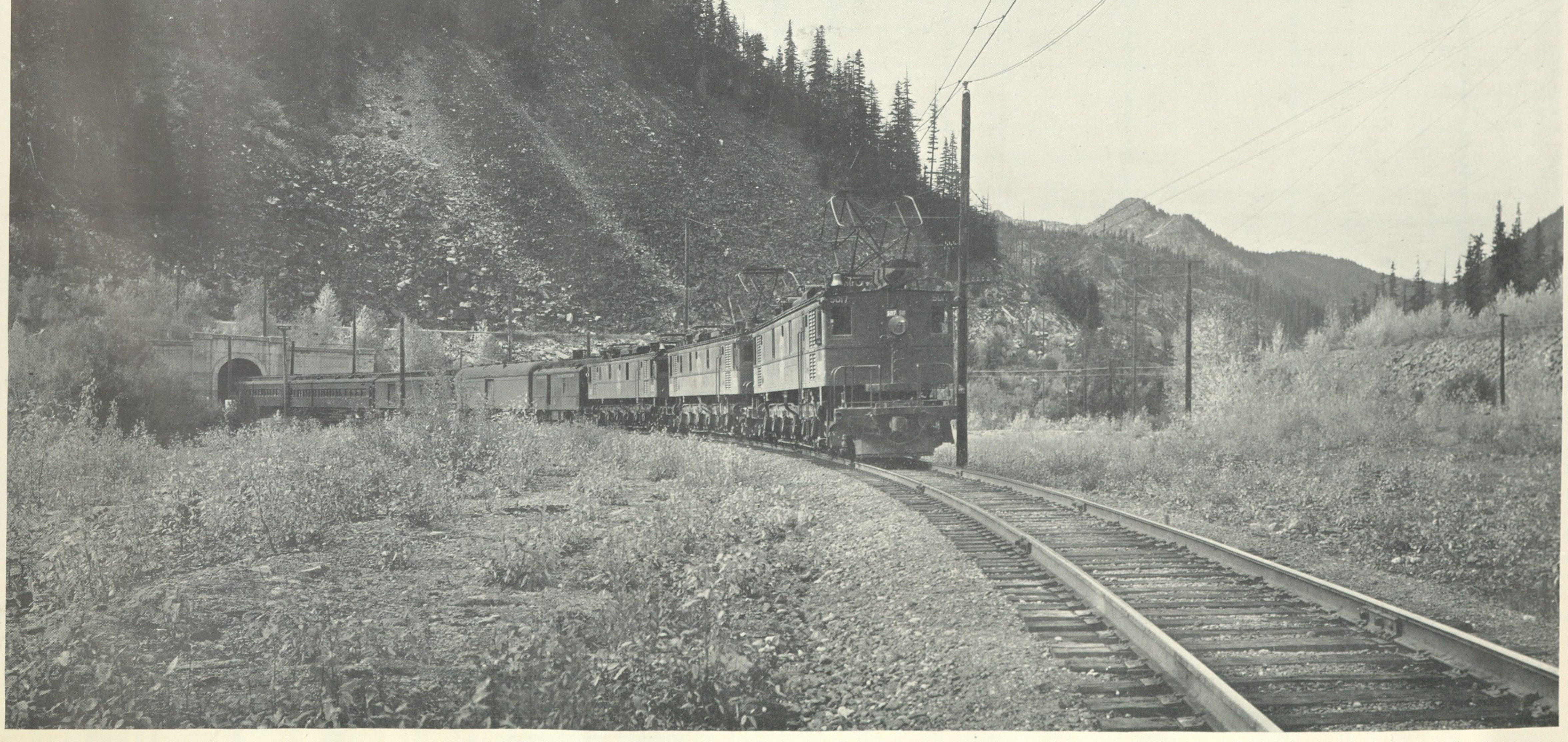

**CASCADE TUNNEL**, eight miles long, the longest railway tunnel in America, completely electrified.

### THE CASCADE TUNNEL

One of America's greatest engineering accomplishments, is 7.79 miles long, absolutely straight from end to end, and on a grade of 1.56 per cent descending from east to west. The construction was authorized Thanksgiving Day, the contract let November 27, 1925. Actual work began immediately. Solid granite was encountered practically throughout. The bore is entirely lined with concrete, is electrified and ventilated.

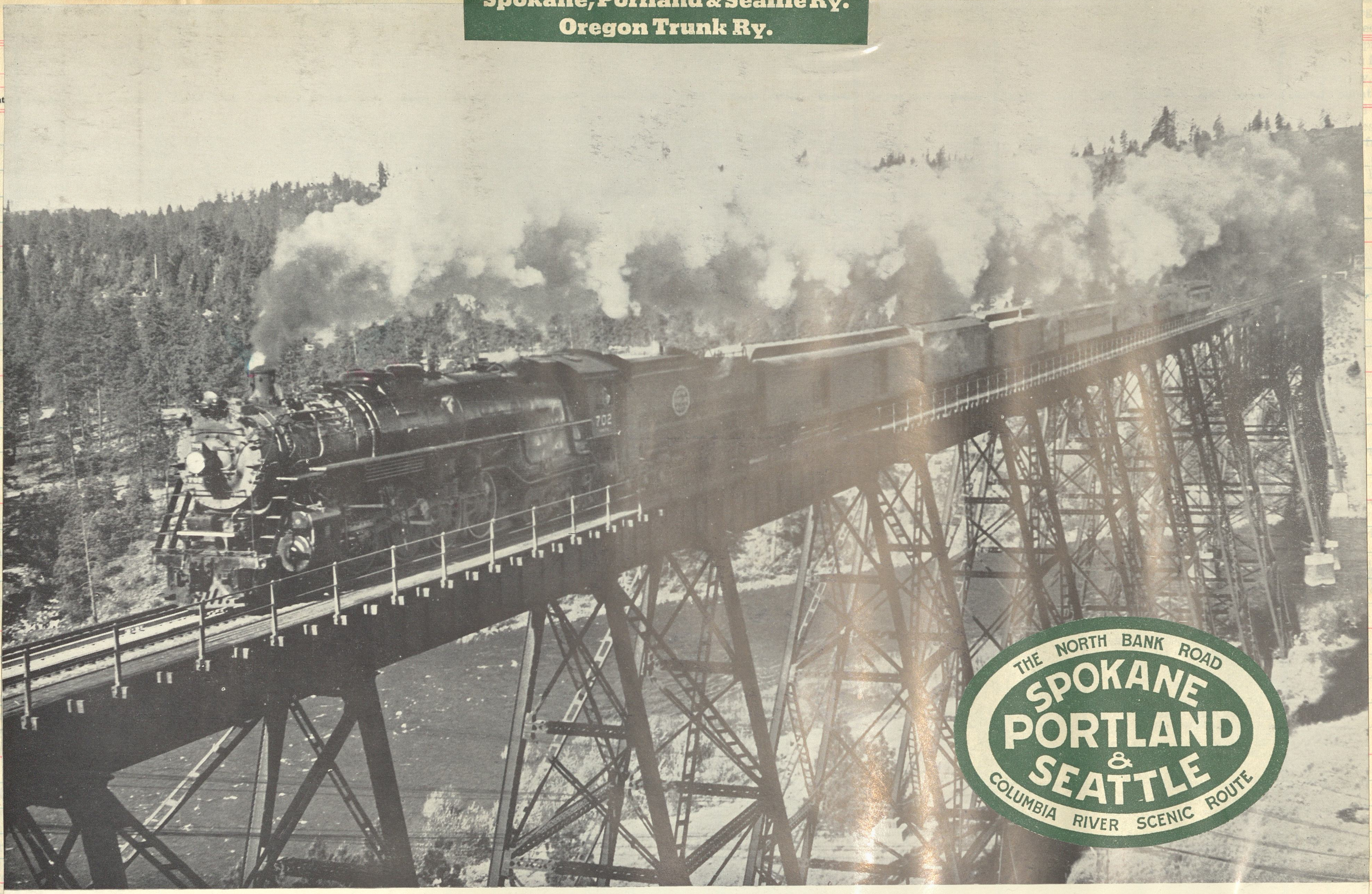
The official opening took place and the first train the "Empire Builder" passed through on January 12, 1929—37 months from the time the first shovel of dirt was removed. Completion of the tunnel and the construction of 19.37 miles of new road on the east slope of the Cascade Range through the Chumstick Valley, and electrifying the line from Appleyard, near Wenatchee to Skykomish on the west slope, formed a three-fold improvement, which shortened the distance by 8.88 miles, eliminated many miles of snow sheds and transformed a slow tedious route over the Cascades into a uniform easy grade line affording fast, clean and pleasant travel.


*"I will make my mark on the face of this earth and no man will ever wipe it out!"*
*James Jerome Hill*


Great Northern passenger train leaving the east portal of the Cascade Tunnel under the Cascade Range in Washington. Courtesy Great Northern.

# Spokane, Portland & Seattle Ry.
# Oregon Trunk Ry.

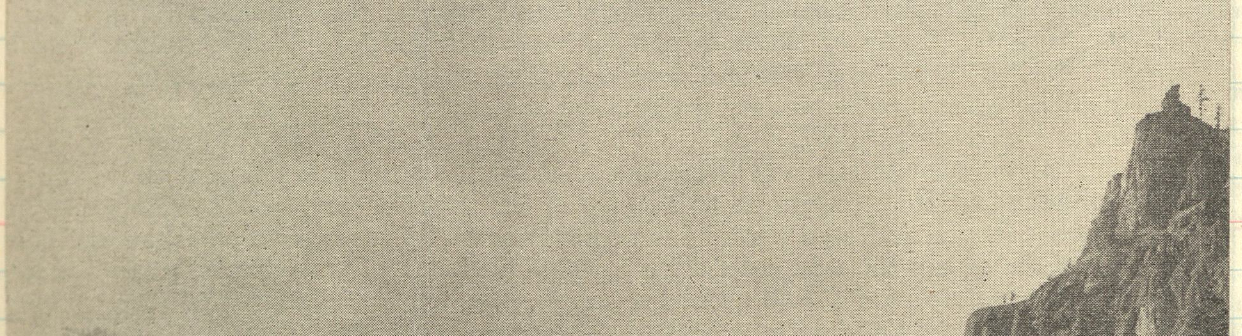
Clos. No. Sold Amount Clos. No. Sold Amount

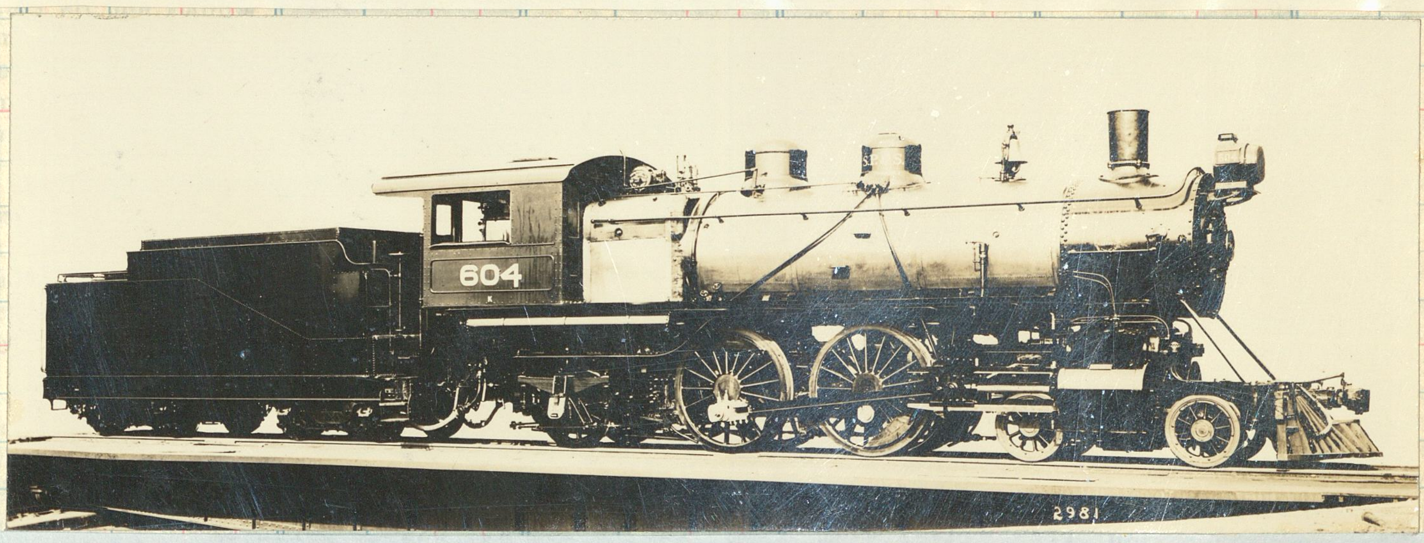

702
THE NORTH BANK ROAD
SPOKANE
PORTLAND
&
SEATTLE
COLUMBIA RIVER SCENIC ROUTE

Just east of Fort Wright in Spokane, Wash., is the bridge over the Spokane River used by both Great Northern and the Spokane, Portland & Seattle, joint subsidiary of GN and Northern Pacific. This is No. 2, the Portland connection for the Empire Builder and the North Coast Limited. W. R. McGee photo.

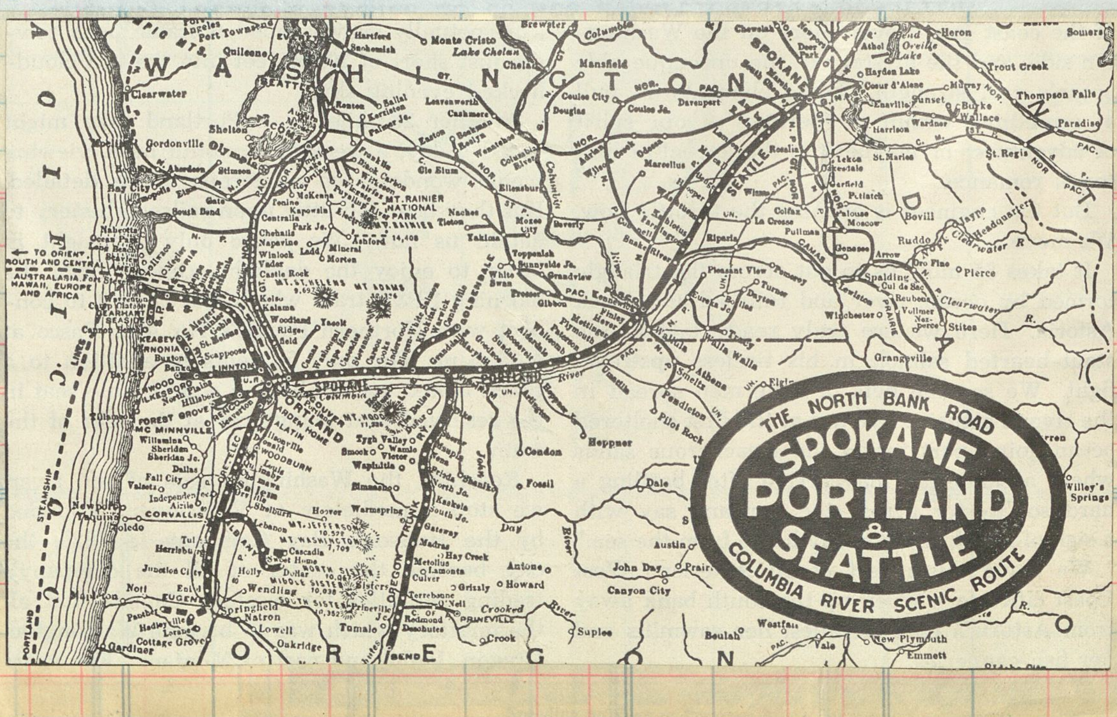
In 1927 was operating 707 miles with 96 engines, 675 freight and 105 passenger cars.

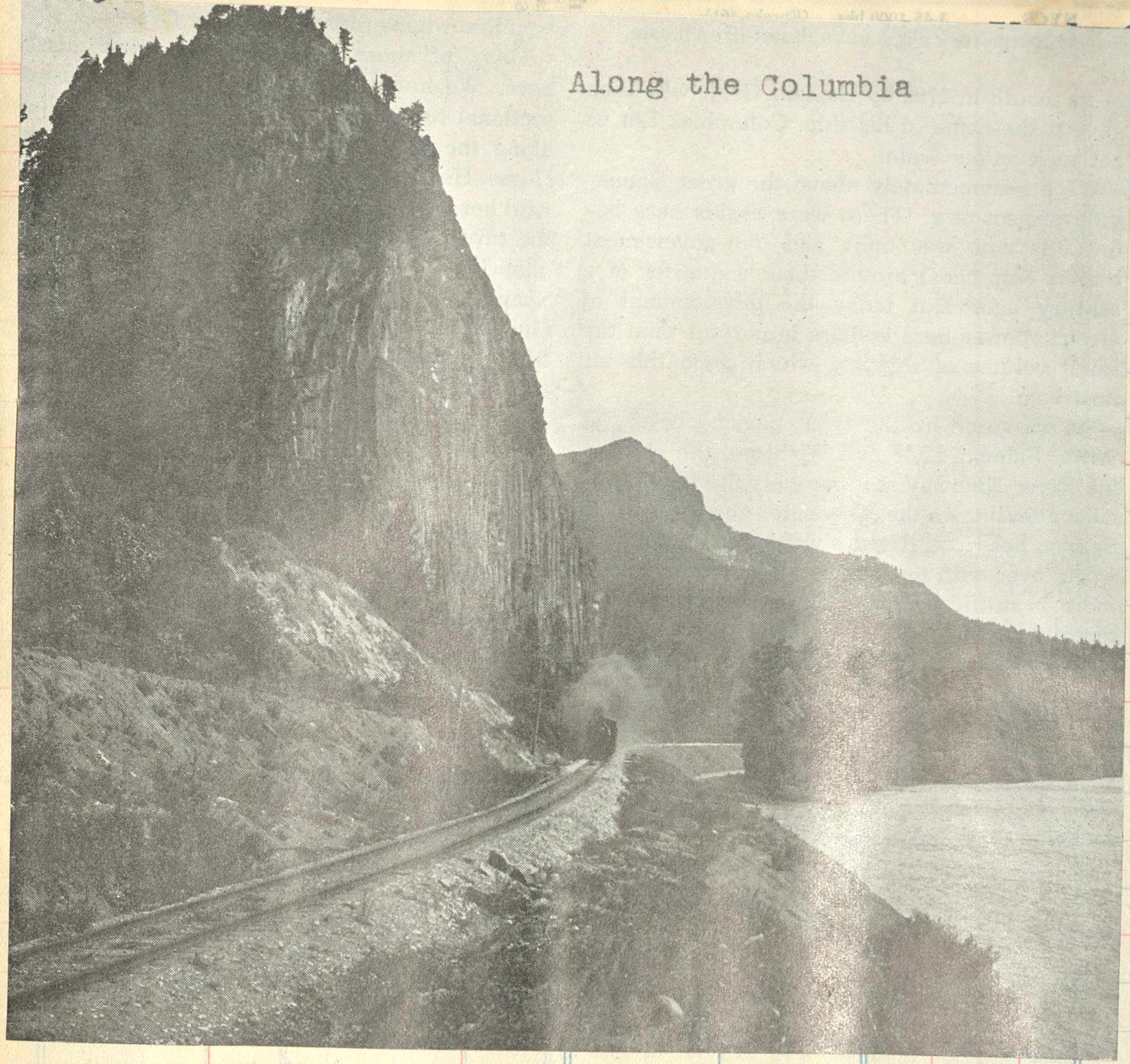
In the Columbia River gorge at MP 65, one mile west of Cooks, Washington

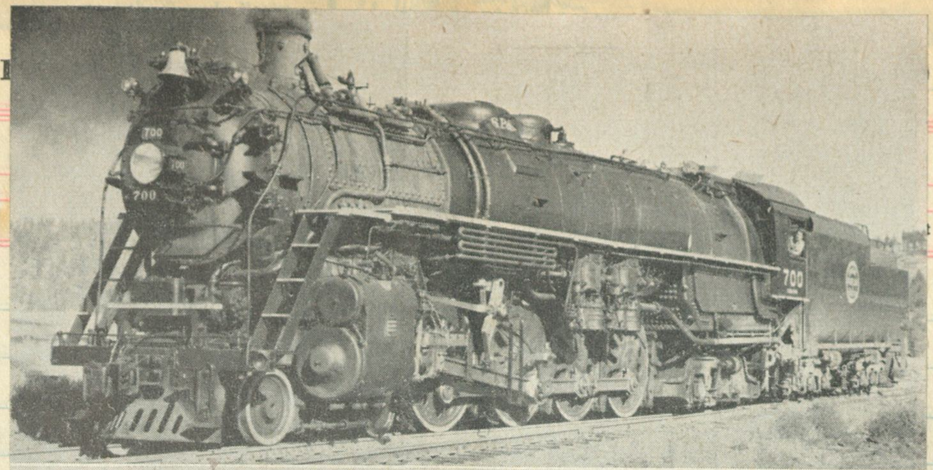


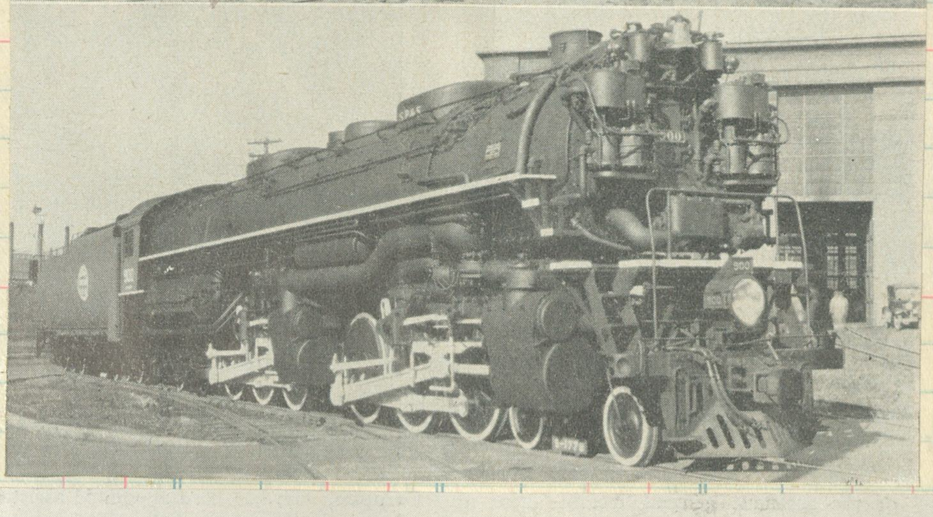


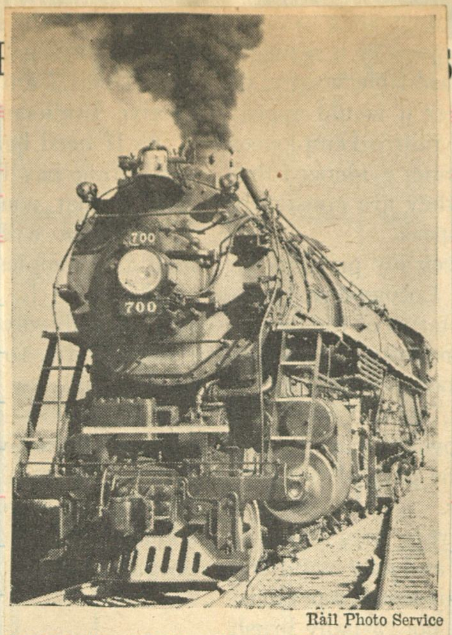
The first block of passenger power for the new railroad was ten Atlantics of G.N. design, noed 600-609, delivered by Baldwin in1909 c/n 33232


WASHINGTON
OREGON
SPOKANE
PORTLAND
THE NORTH BANK ROAD
SPOKANE
PORTLAND
&
SEATTLE
COLUMBIA RIVER SCENIC ROUTE

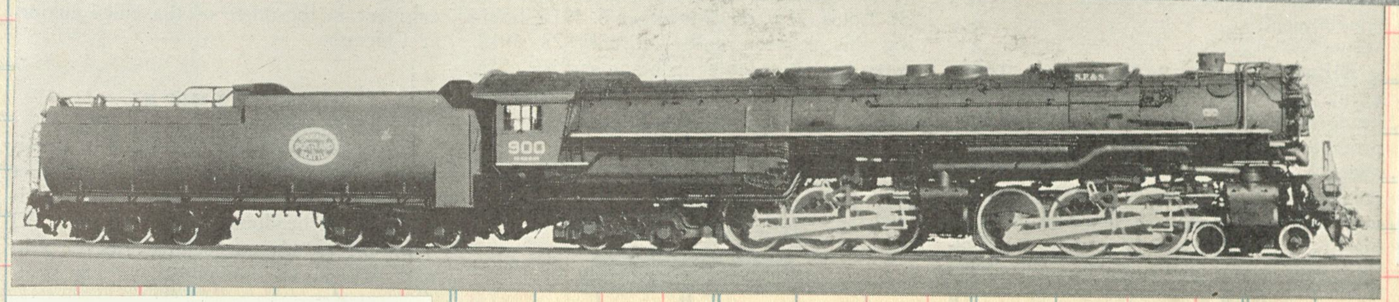

Along the Columbia



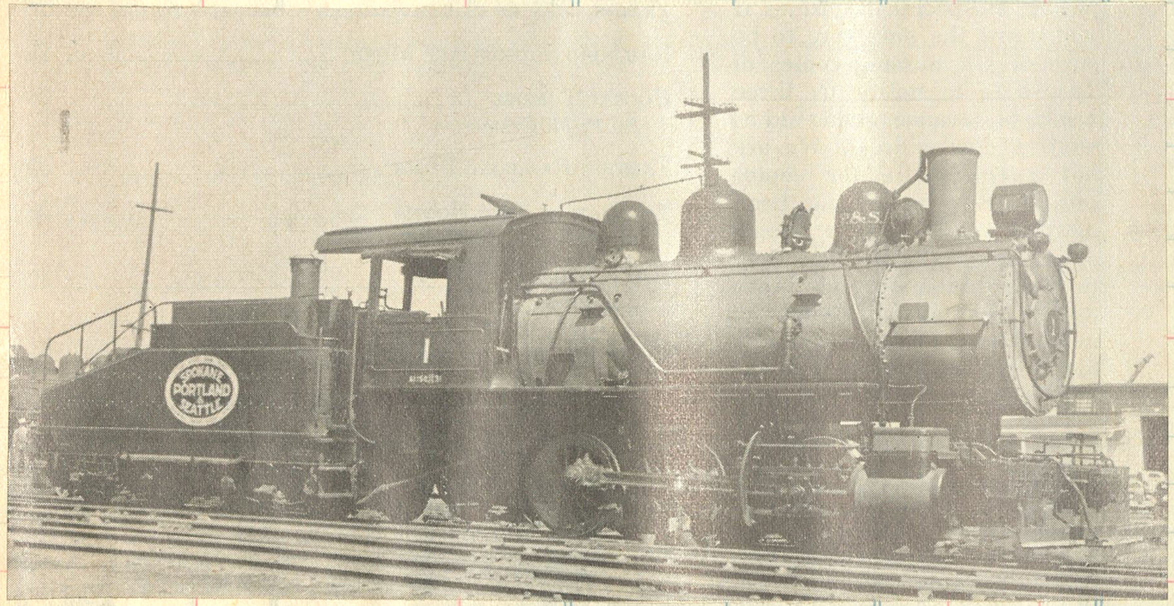



Rail Photo Service

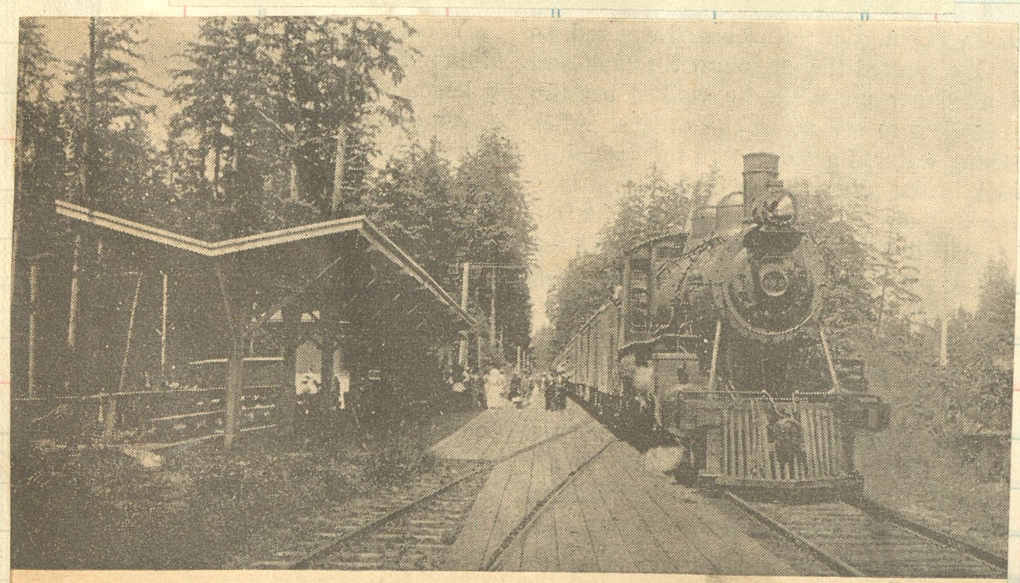
SPOKANE, PORTLAND & SEATTLE RAILROAD'S ENGINE 700


Six, 900-905 built
at Schenectady in
1937 c/n 68990

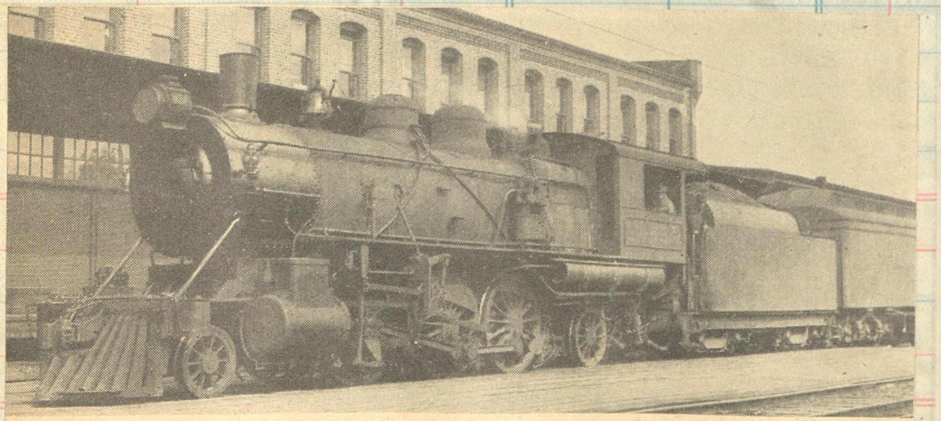
Nos 903 & 904 worked
as G.N. 4000 & 4001
1940 thru 1946.


1 - 5 Manchester 1907

**CAPE HORN**, a promontory, sheer to the water, through which passes a railway tunnel 2,369 feet in length.


**SPOKANE, PORTLAND & SEATTLE'S** hat-valved 150 pulls into Gearhart, Oregon, a favorite vacation spot of the early 1900s

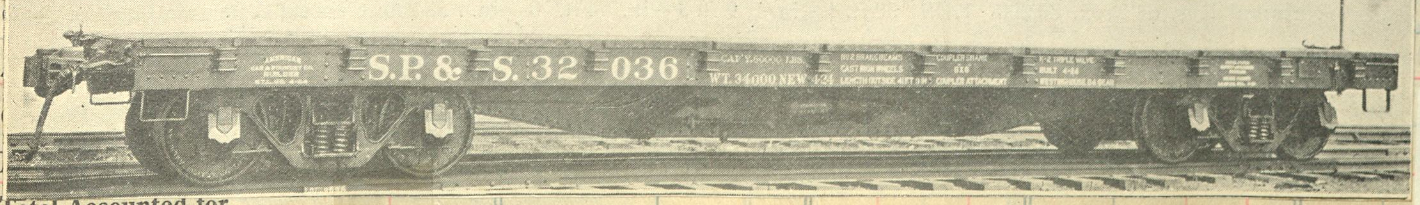
**COLUMBIA RIVER**
Basalt Cliffs

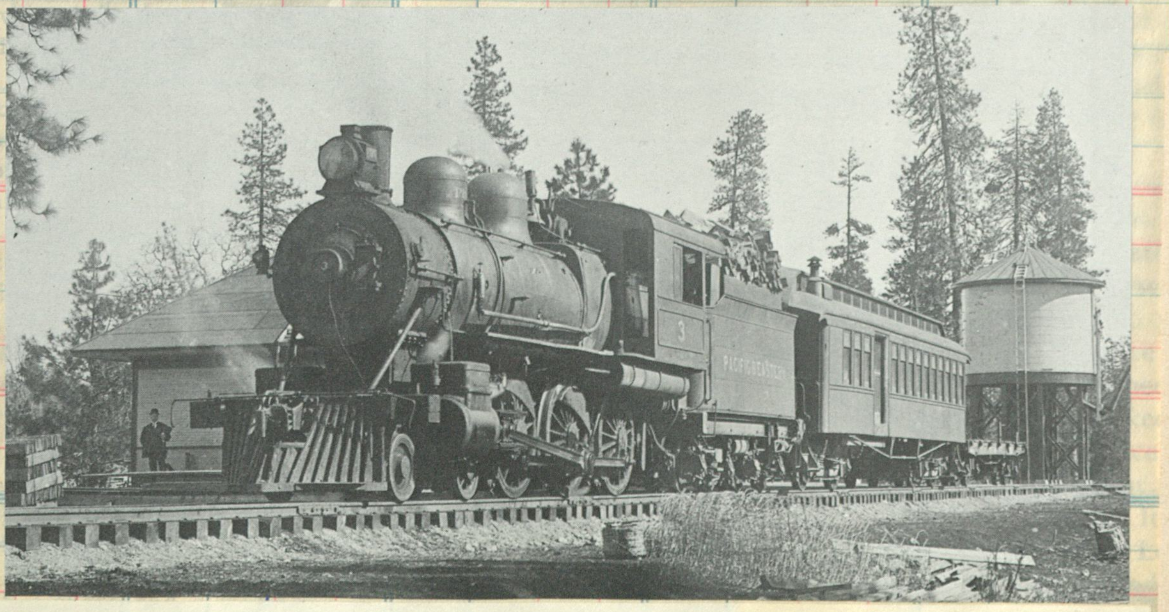

D. G. Harris

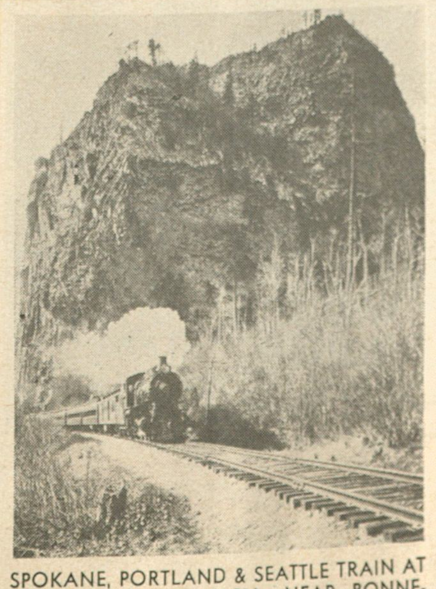
LOCOMOTIVE 455 OF THE SPOKANE, PORTLAND & SEATTLE AT PORTLAND, ORE.

The 455, a 2-6-2 ex
G.N. #1583 built by
Baldwin in 1907 and
to the S.P.& S. 1908
c/n 30440

acf 1924



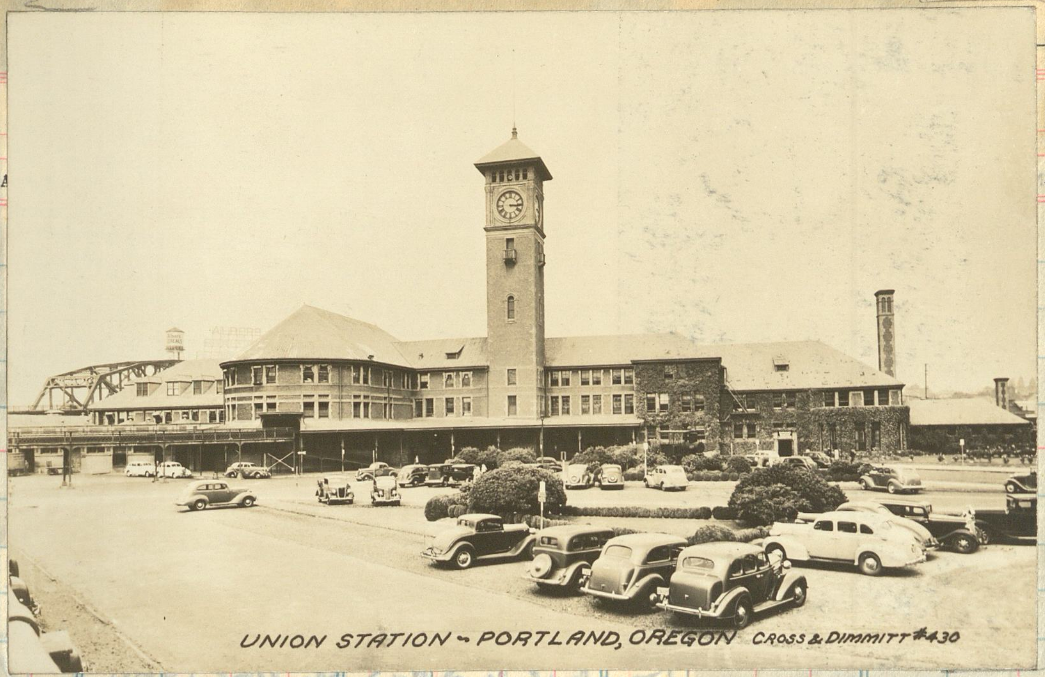

Pacific & Eastern #3--a woodburner! Note wood stacked on the tank. A 4-6-0 blt as G.N. #938 by Rogers in 1902 c/n 5772. To P&E in 1910, then SP&S #159 in 1912 ret 1940


SPOKANE, PORTLAND & SEATTLE TRAIN AT BEACON ROCK, WASH., NEAR BONNEVILLE DAM

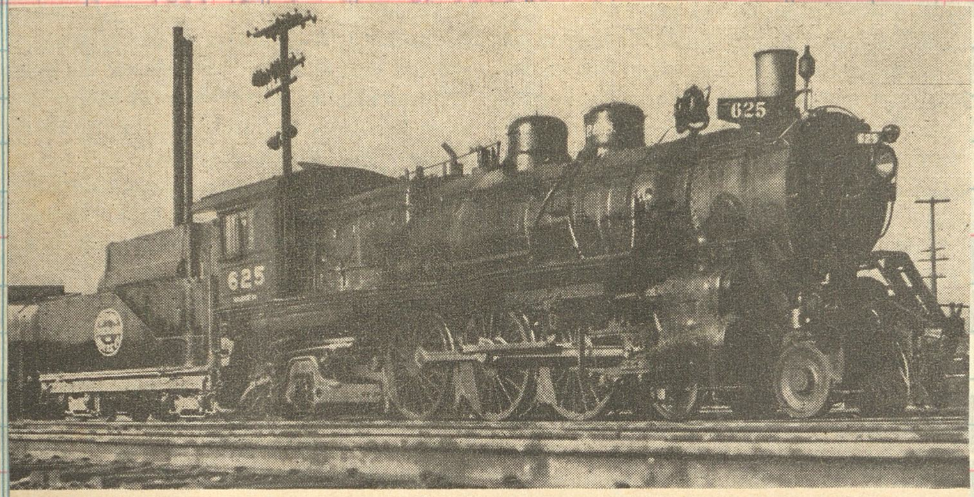
Total Accounted for

Hoyt ST

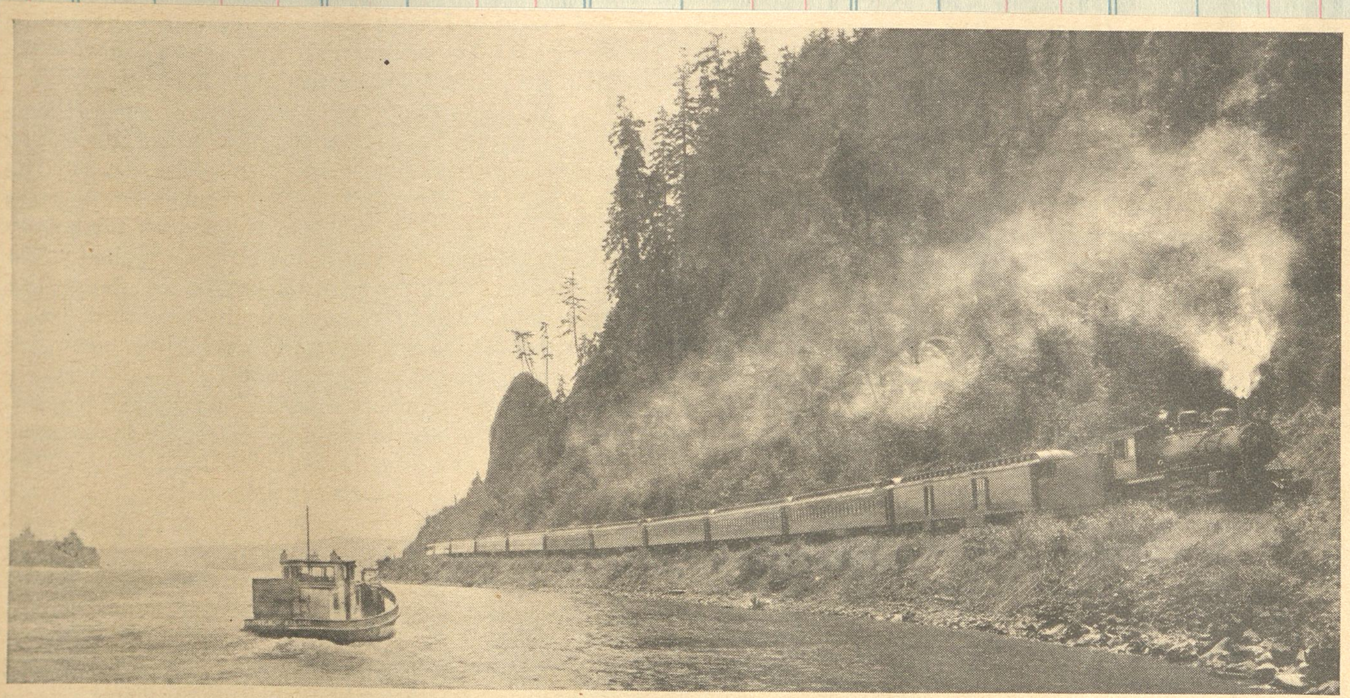
173


UNION STATION - PORTLAND, OREGON CROSS & DIMMITT #430

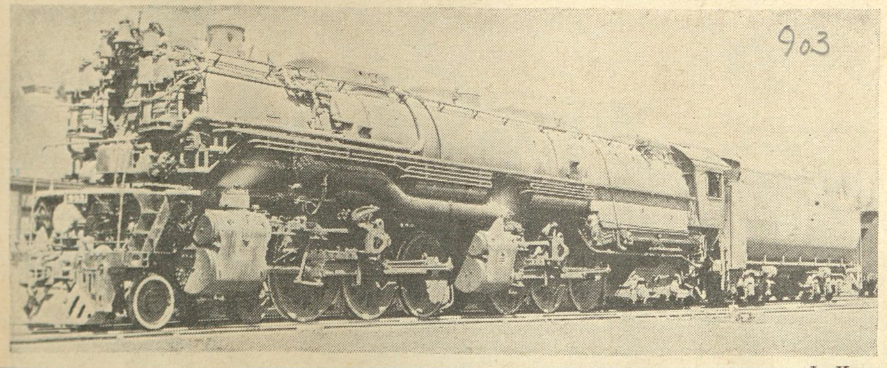
Pacific #625 was built by Baldwin in 1910 as 2nd G. N. 1052, a 4-6-0 class E-14 c/n 35100. Same year was transfered to S.P.& S. #109. In Jan 1930 went to the GN's Hillyard Shops and reblt as 4-6-2 #625.


Samuel H. Lewis

Spokane, Portland & Seattle No. 625 waits patiently at the Portland roundhouse lead before taking out the *Columbia River Express.* Leaving on the advertised, at 9 a.m., this Hls-type *Pacific* handles the train from Portland, Ore., to Pasco, Wash., at which point it is turned over to the Northern Pacific for the remainder of the journey to Spokane


ON THE LOWER COLUMBIA RIVER

At this point, 50 miles west of Portland, Ore., tracks of the Spokane, Portland & Seattle are on the very brink of the river bank. Across the

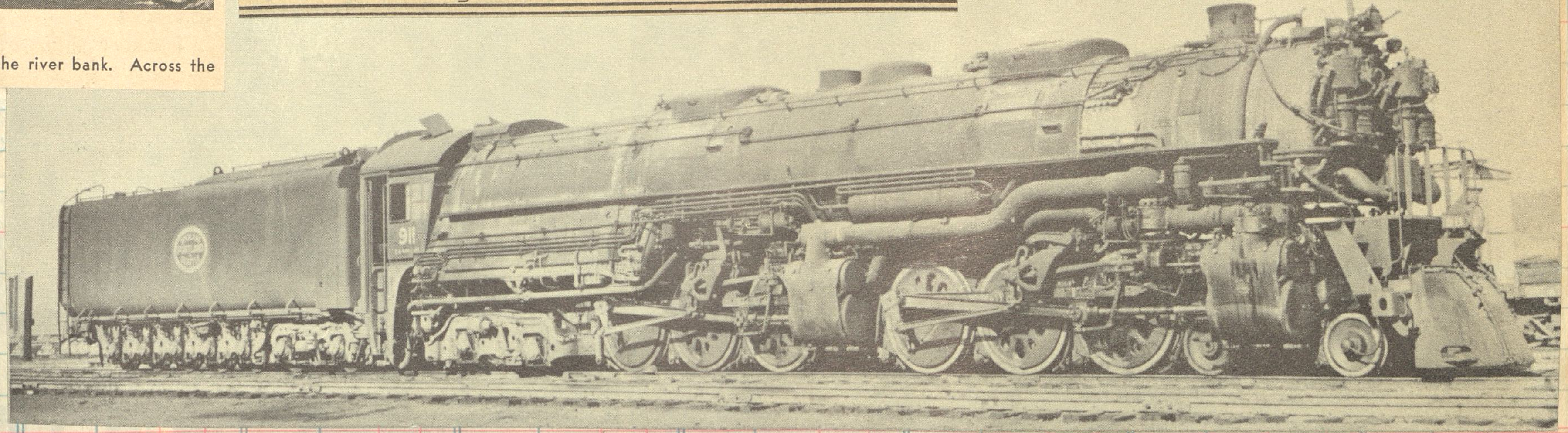

903

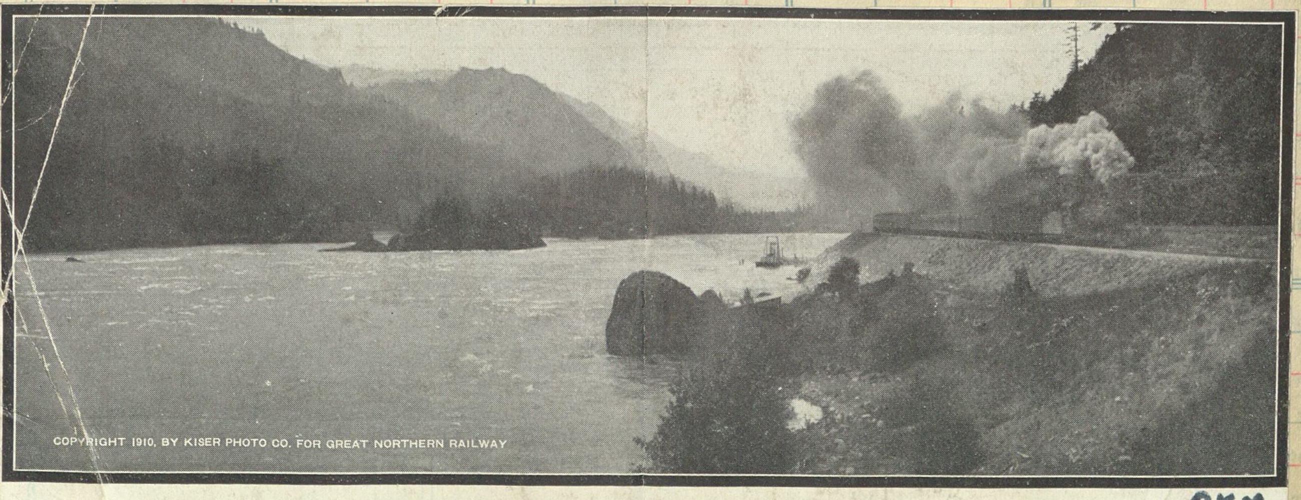
"The Northwest's Own Railway"
SP&S
900
SPOKANE PORTLAND AND SEATTLE RY.

THE NORTH BANK ROAD
SPOKANE PORTLAND & SEATTLE
COLUMBIA RIVER SCENIC ROUTE

The Majestic Columbia River
Followed for 220 Miles, enroute to Portland.

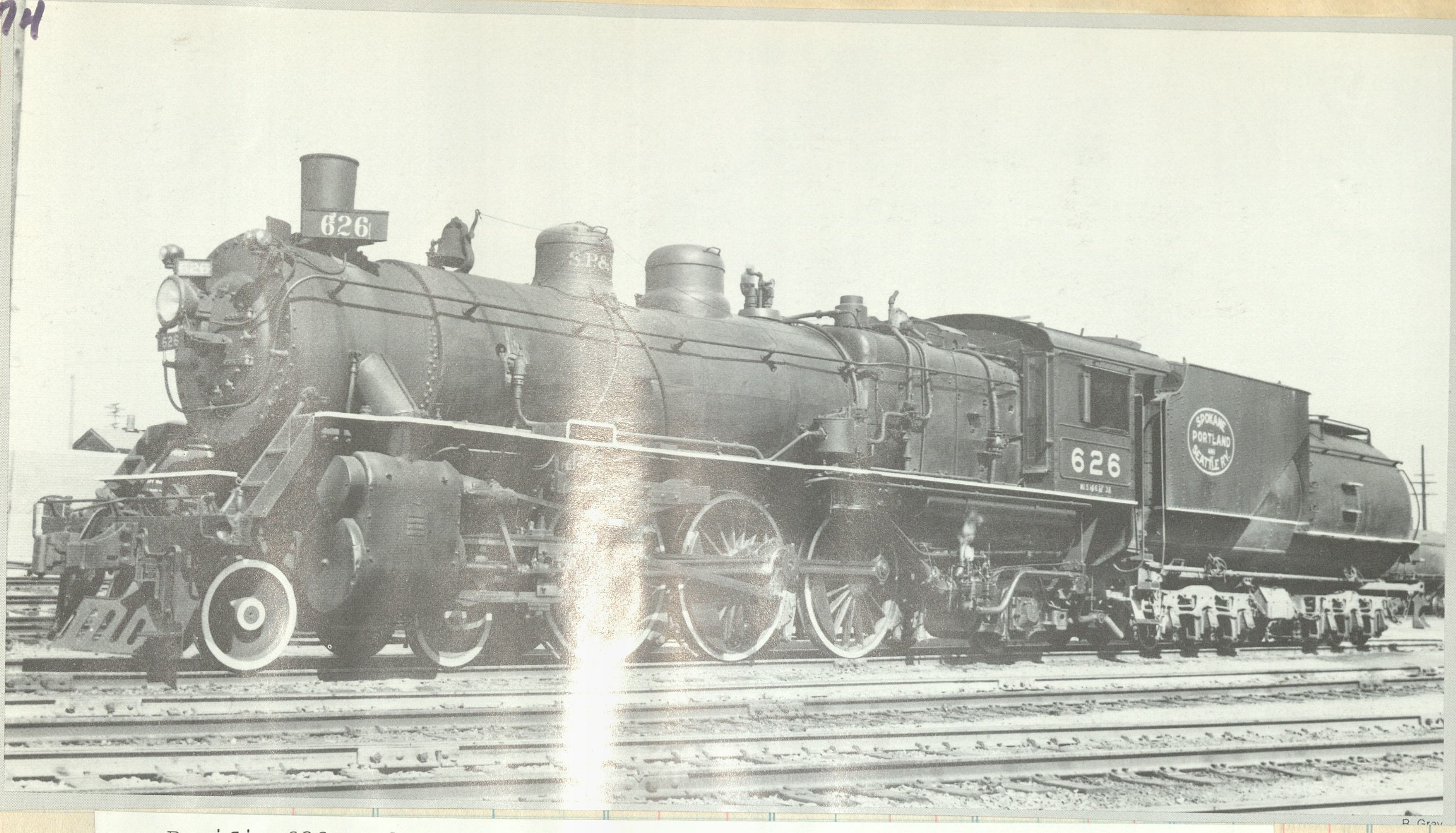
The last engine for the North Bank Road



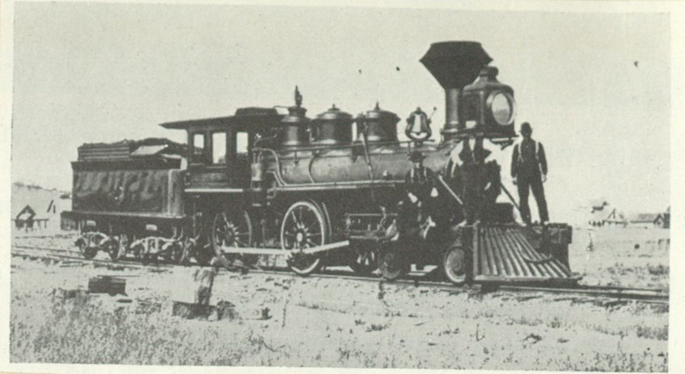

COPYRIGHT 1910, BY KISER PHOTO CO. FOR GREAT NORTHERN RAILWAY

Speeding on Way to Portland Along the Columbia River

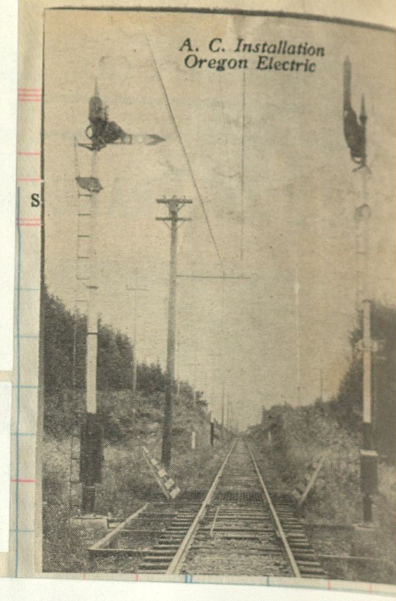
OKM


626
SP&S
SPOKANE PORTLAND AND SEATTLE RY
626
R. Gray

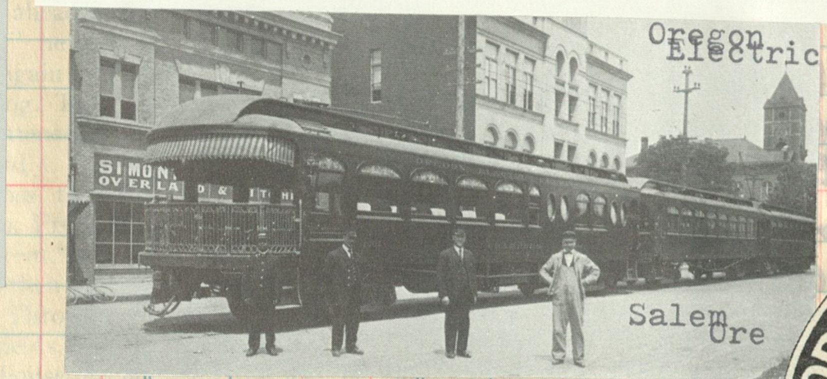
Pacific 626, a husky "Amazon", enjoys a period of sunshine at Portland



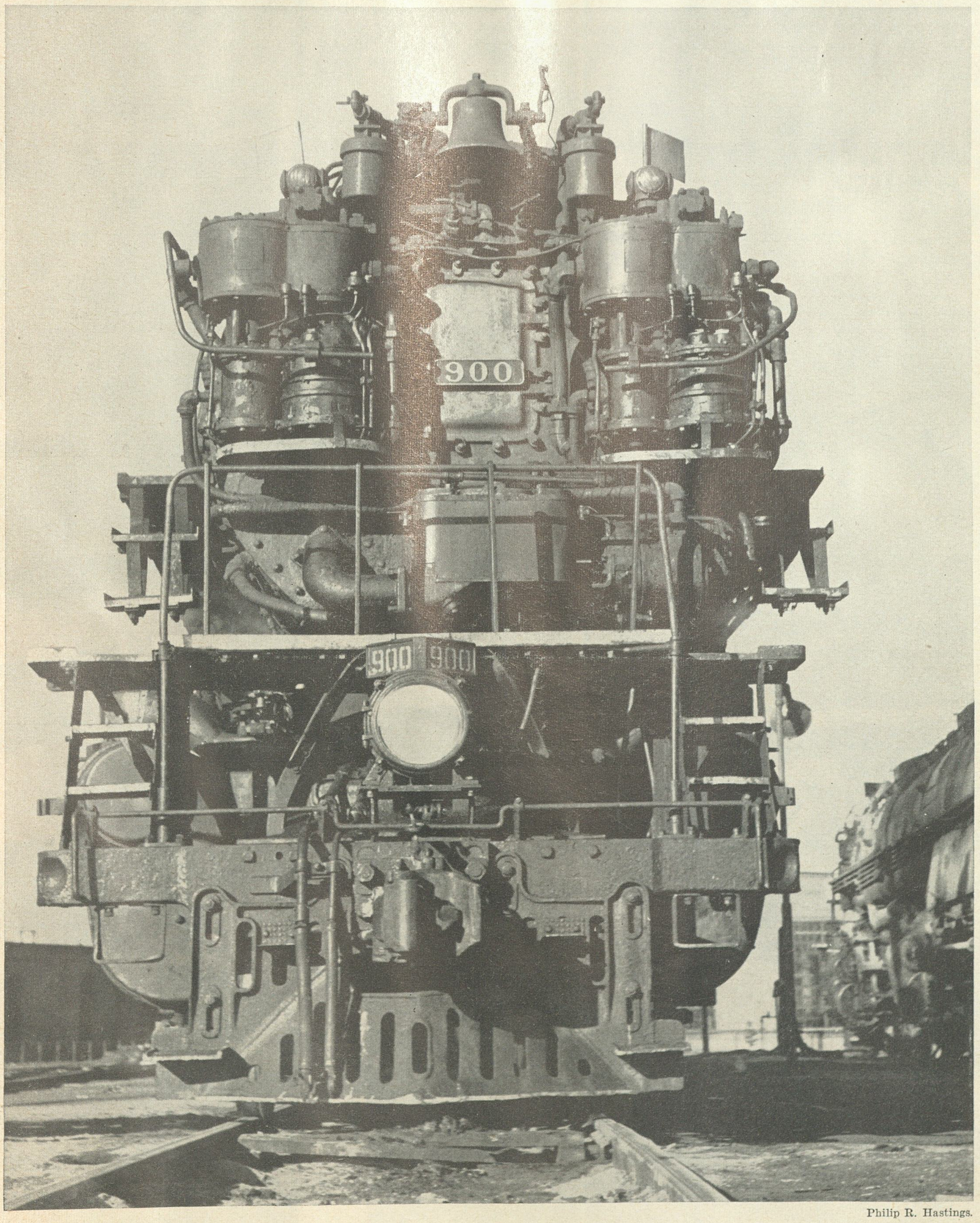
**COLUMBIA RIVER & NORTHERN RAILWAY** ran from Goldendale to Lyle, Washington, and was connected with Dalles, Portland & Astoria Navigation Co., the famous "Regulator Line" of river steamboats. Engine 1, shown here, was ex-O. R. & N. No. 44, later became Spokane, Portland & Seattle No. 51, and was the first locomotive to enter Goldendale.


A. C. Installation
Oregon Electric

← (626) Built by Baldwin, c/n 35010, as G.N. #1038 in 1910 a class E-14 Ten wheeler. Rebuilt at Hillyard shops in 1926 as a 4-6-2 and noed 1378, class H-7. In November 1944 was transfered to the S.P.& S. as #626.

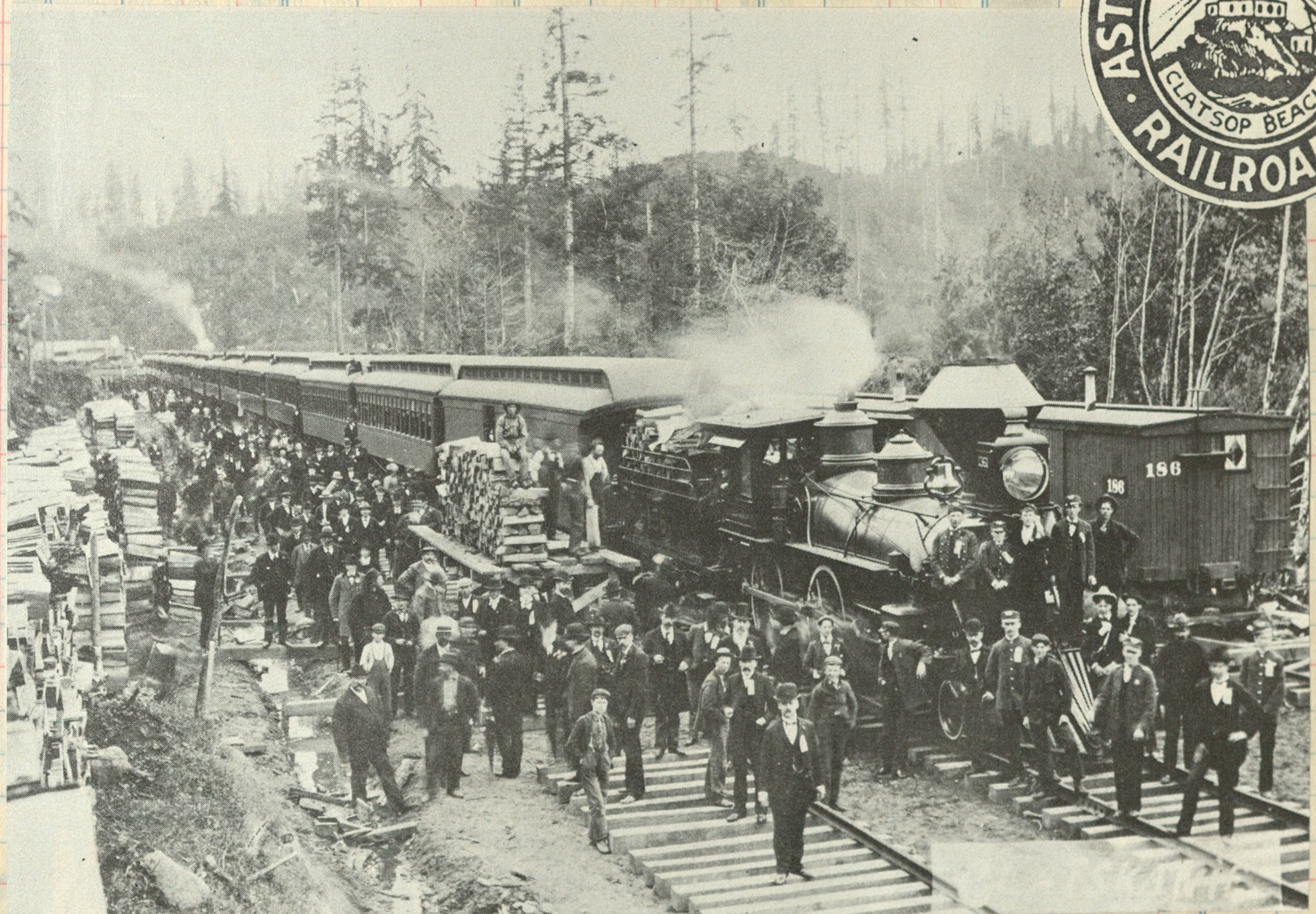

Oregon Electric
SIMON OVERLA
Salem Ore

ASTORIA & COLUMBIA RIVER
CLATSOP BEACH
RAILROAD

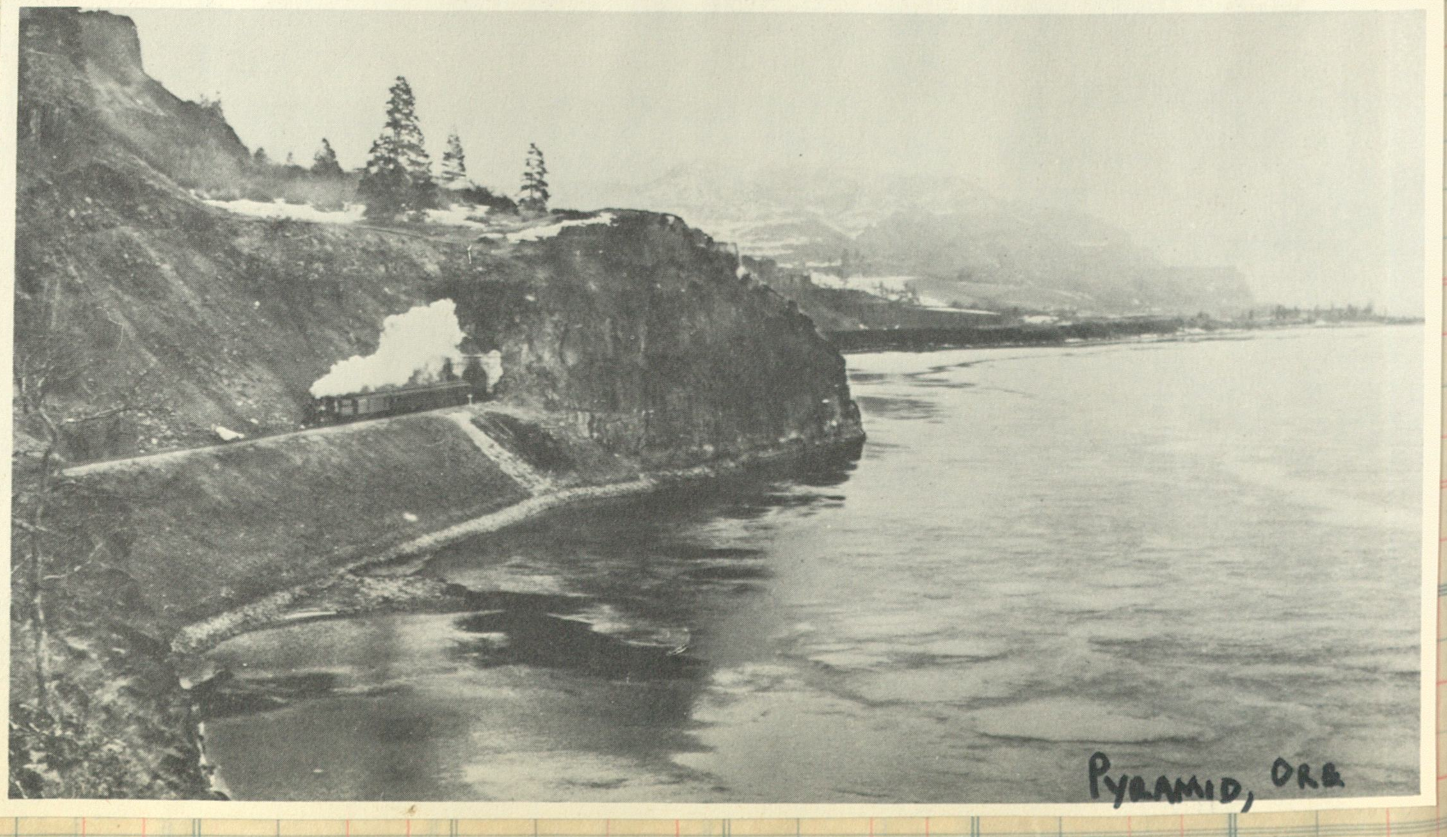


Philip R. Hastings.

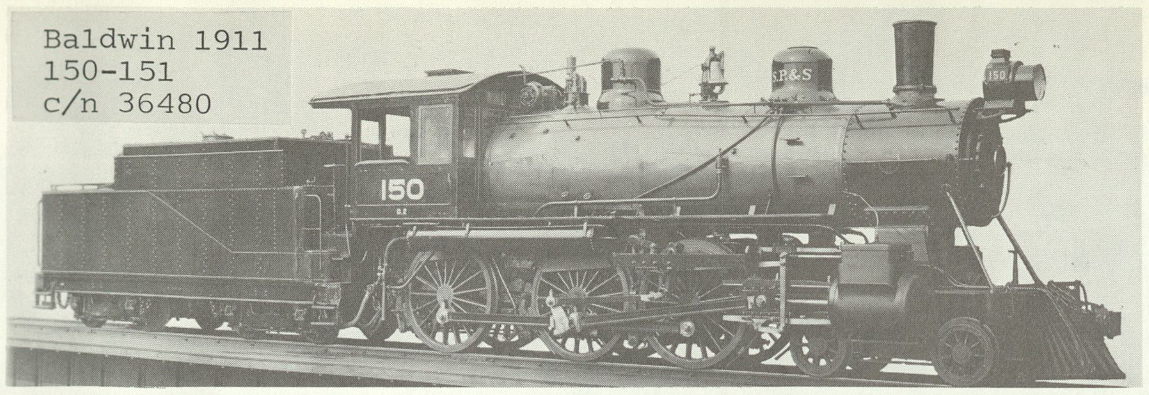
Spokane, Portland & Seattle 4-6-6-4 No. 900 articulates for the camera on a curve at the Hillyard engine terminal at Spokane. The awesome Alco is a duplicate of a Z-6 Challenger on the Northern Pacific, which is not surprising inasmuch as NP owns half of the Northwest carrier.



The first train from Astoria to Portland in May of 1898 being pulled by the 1361 borrowed from the S.P. [Former O&C #28 Baldwin 1883]

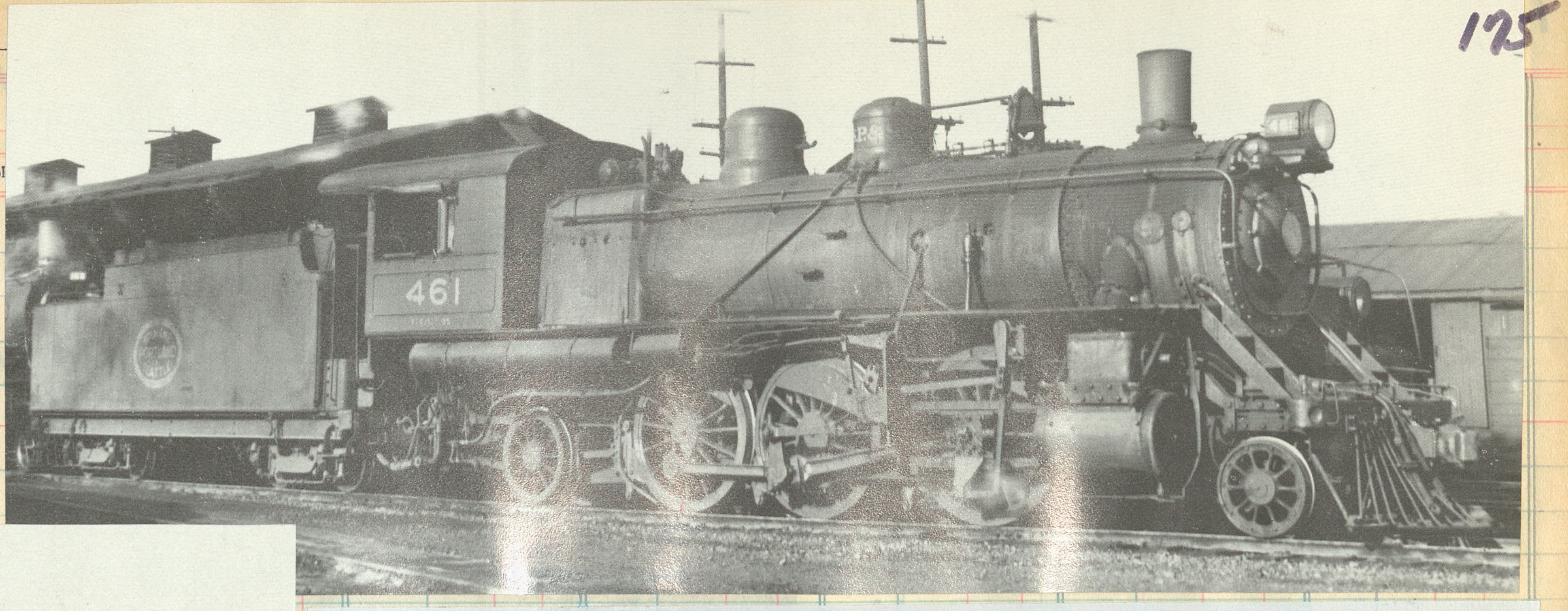


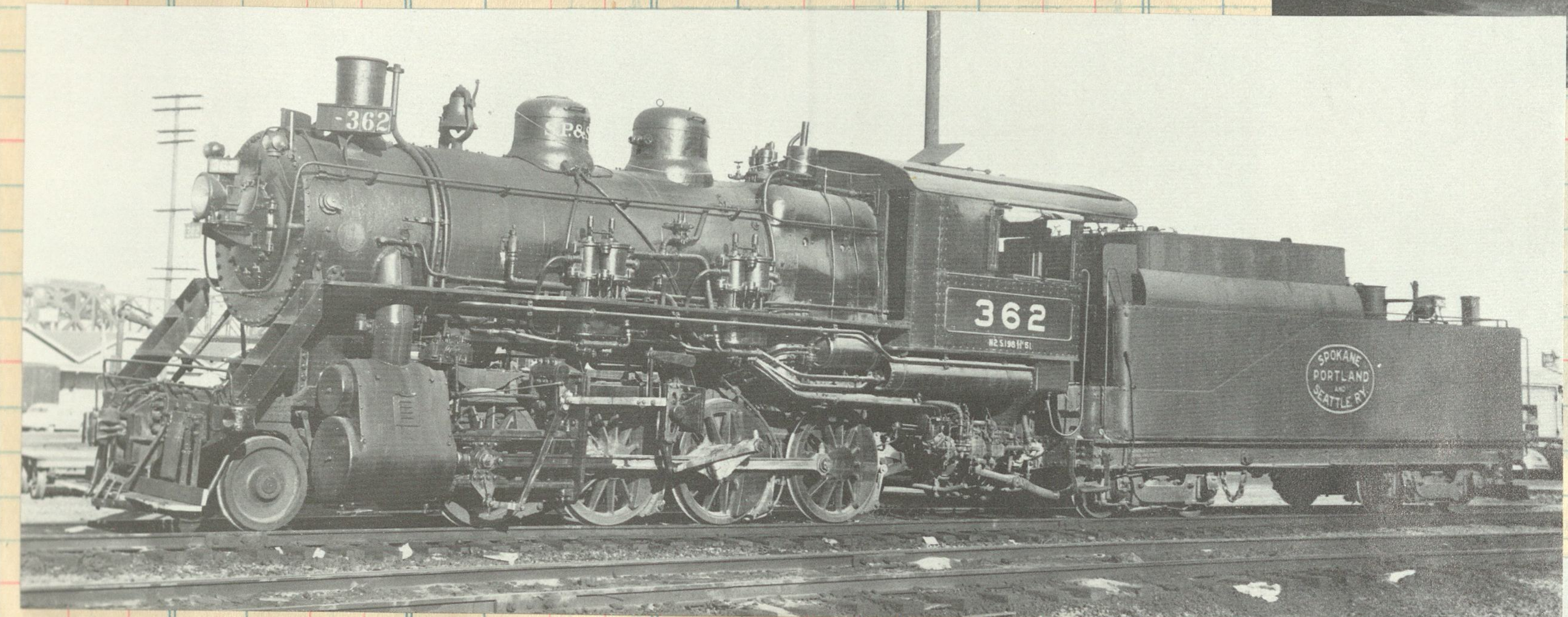
Pyramid, Ore



Baldwin 1911
150-151
c/n 36480

Spokane, Portland & Seattle #150, 4-6-0 type.

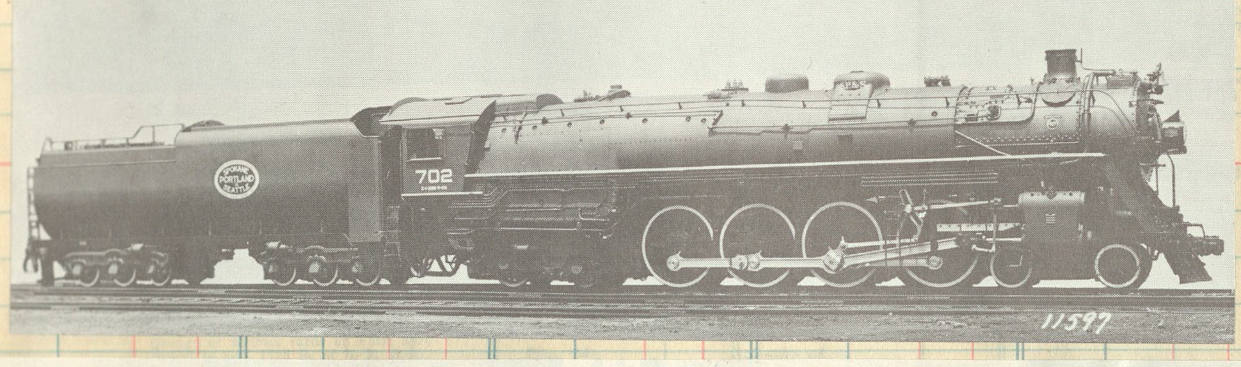




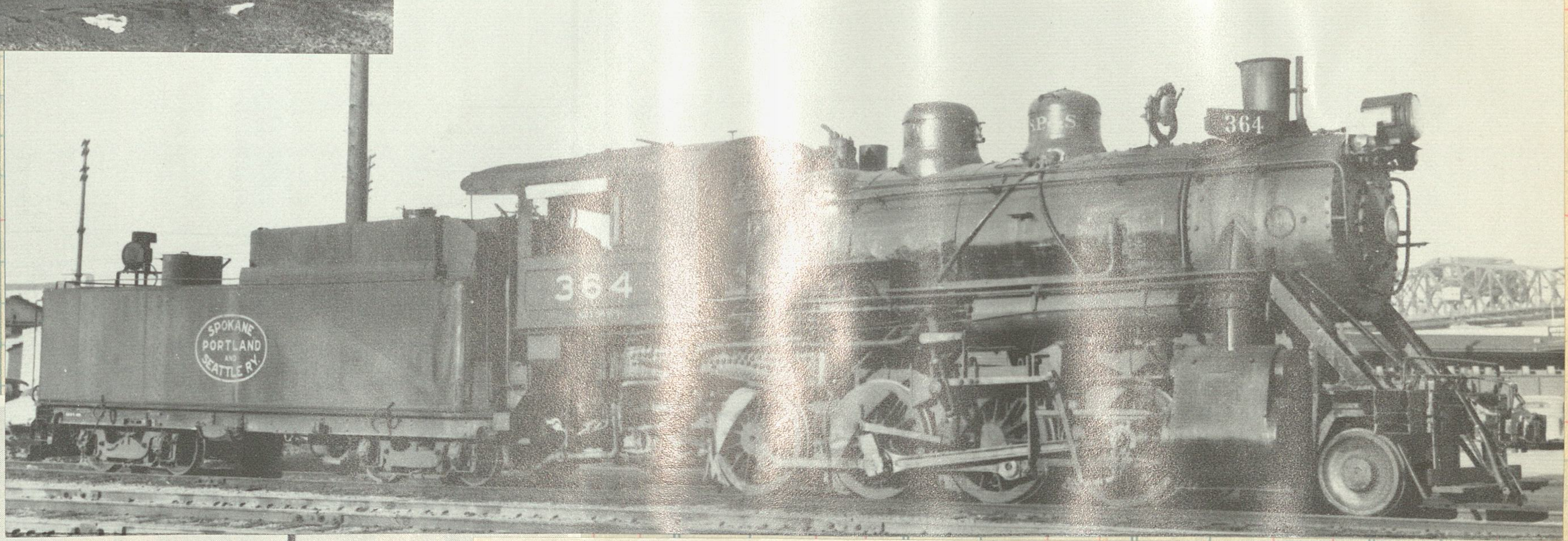
The 461 was one of seventeen Prairie type built by Baldwin in 1907 for the Great Northern but transfered to the S.P.& S. 1908 and noed 450-466. The 461 was G.N. #1595 c/n 30580 Ret 1948

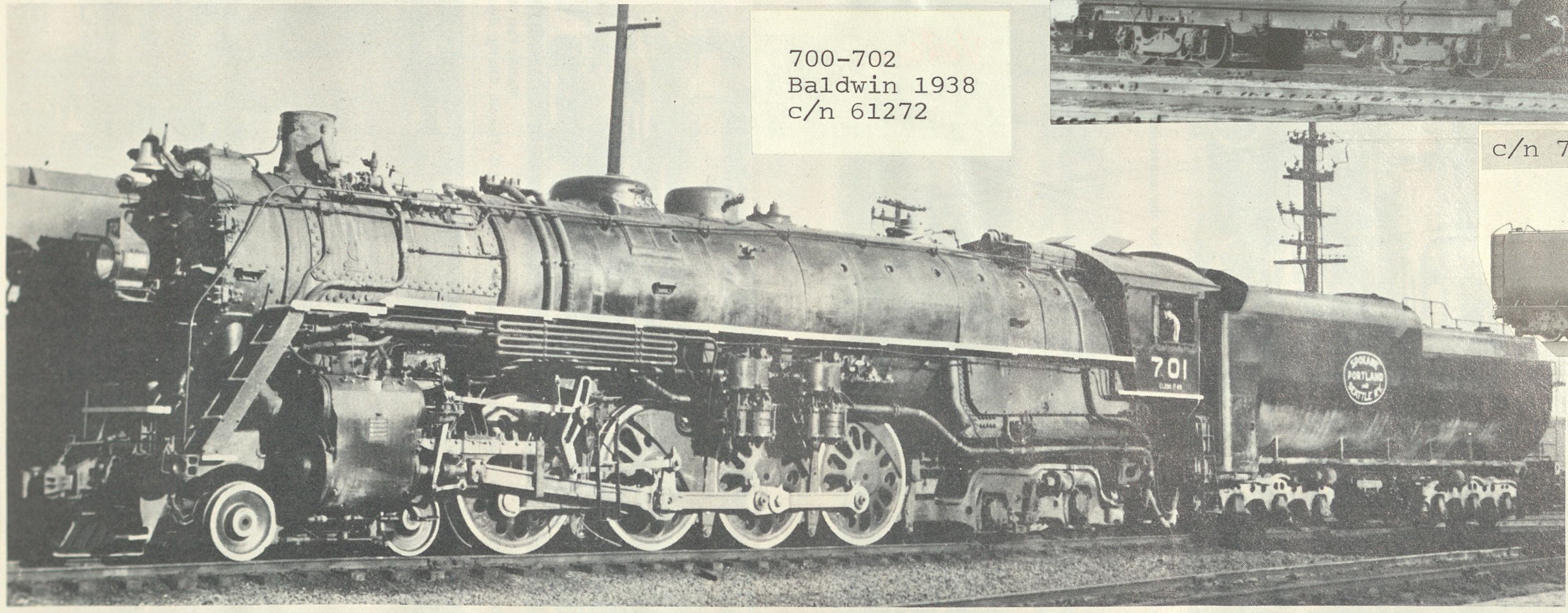
++++++++++++++++++++++++++++

In 1909 the Great Northern turned over to the S.P.& S. ten of their class F-8 2-8-0's. The S.P.& S. reclassed them N-2 and were noed 355-364. All were built by Baldwin in 1907. The 362 was G.N. #1255 c/n 32391 and the 364 was G.N. #1263 c/n 32485.



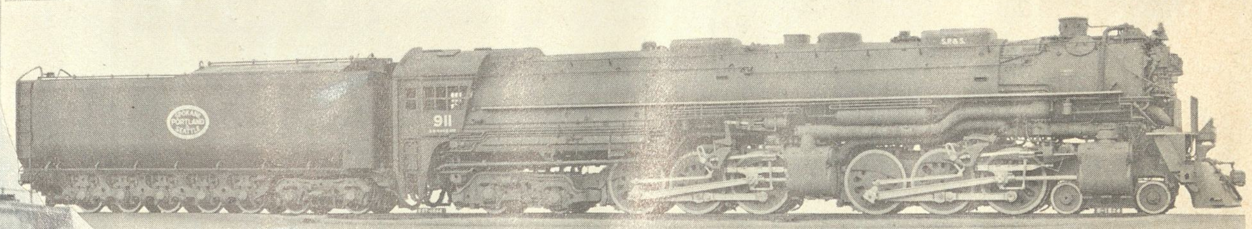
11597





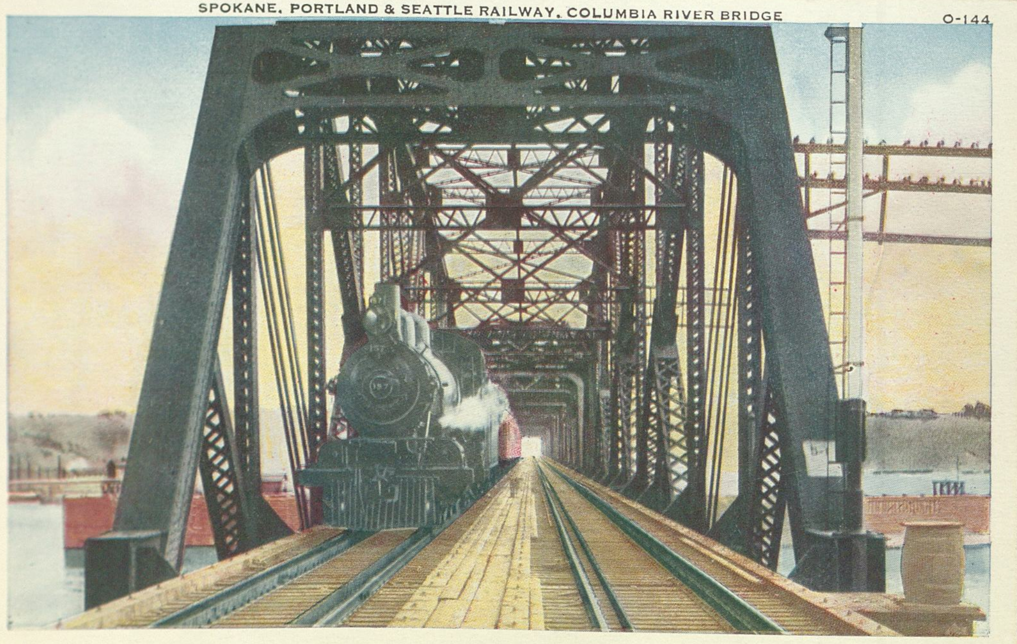
700-702
Baldwin 1938
c/n 61272

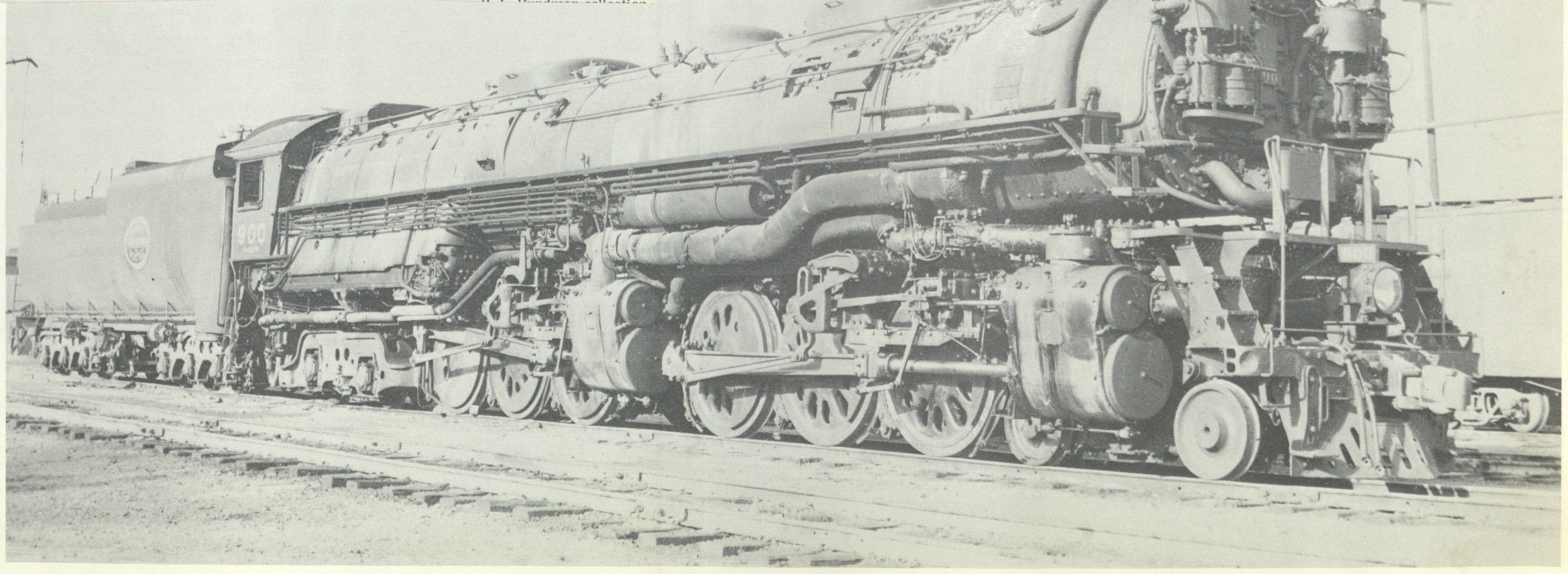
c/n 71334

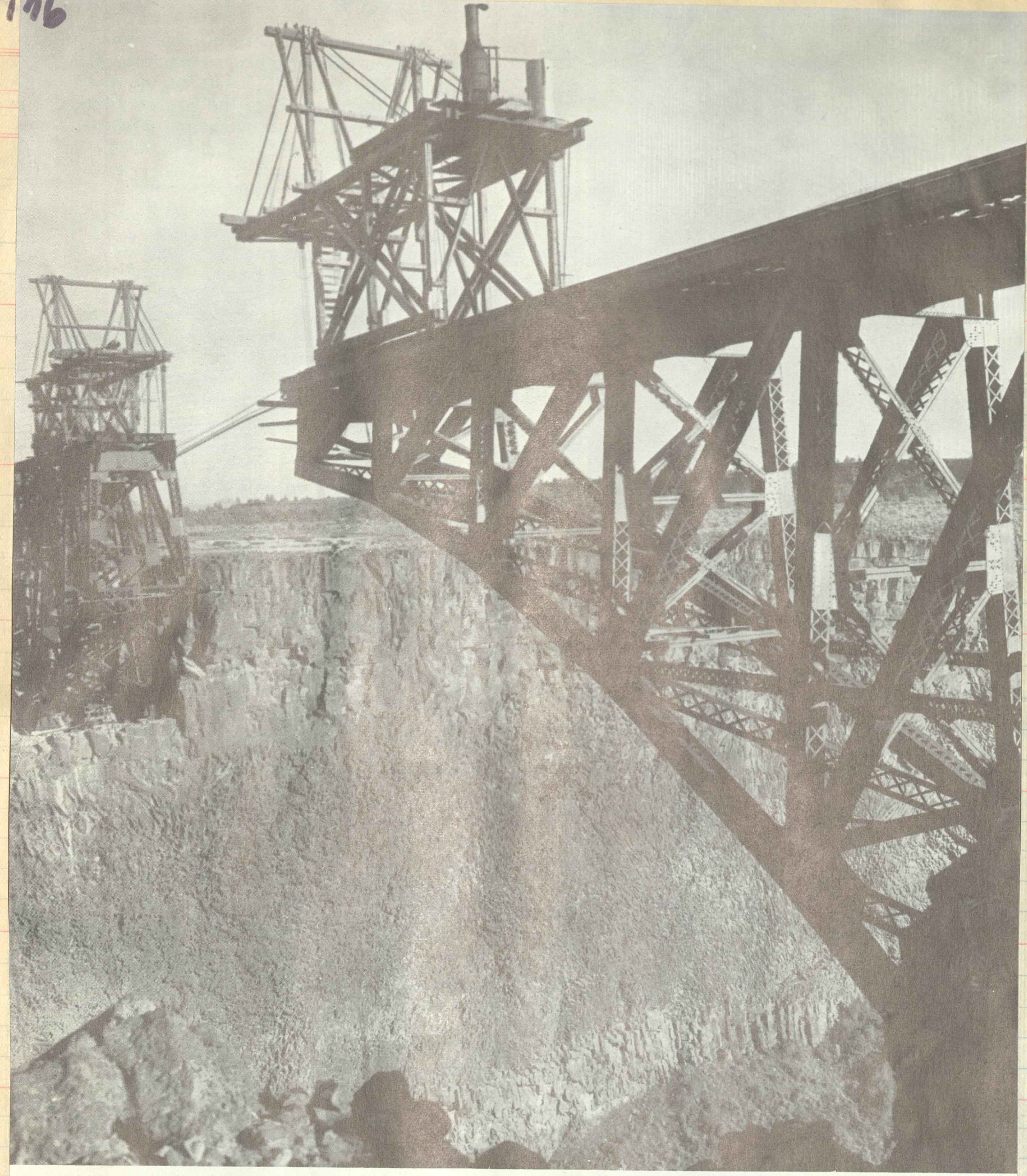


The last power for the North Bank Road was a pair of 4-6-6-4's (910-911) delivered by Schenectady October 1944

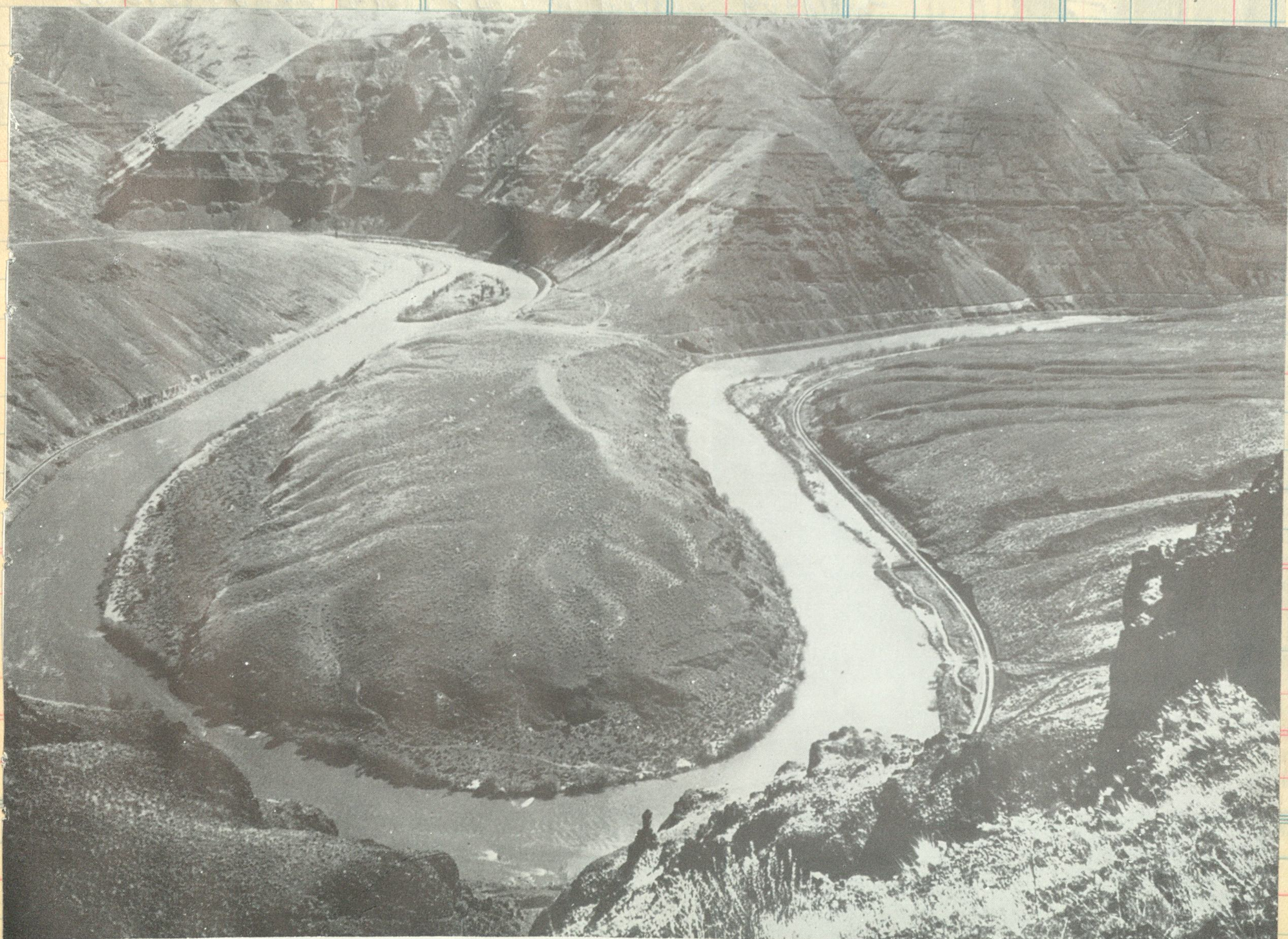
SPOKANE, PORTLAND & SEATTLE RAILWAY, COLUMBIA RIVER BRIDGE O-144



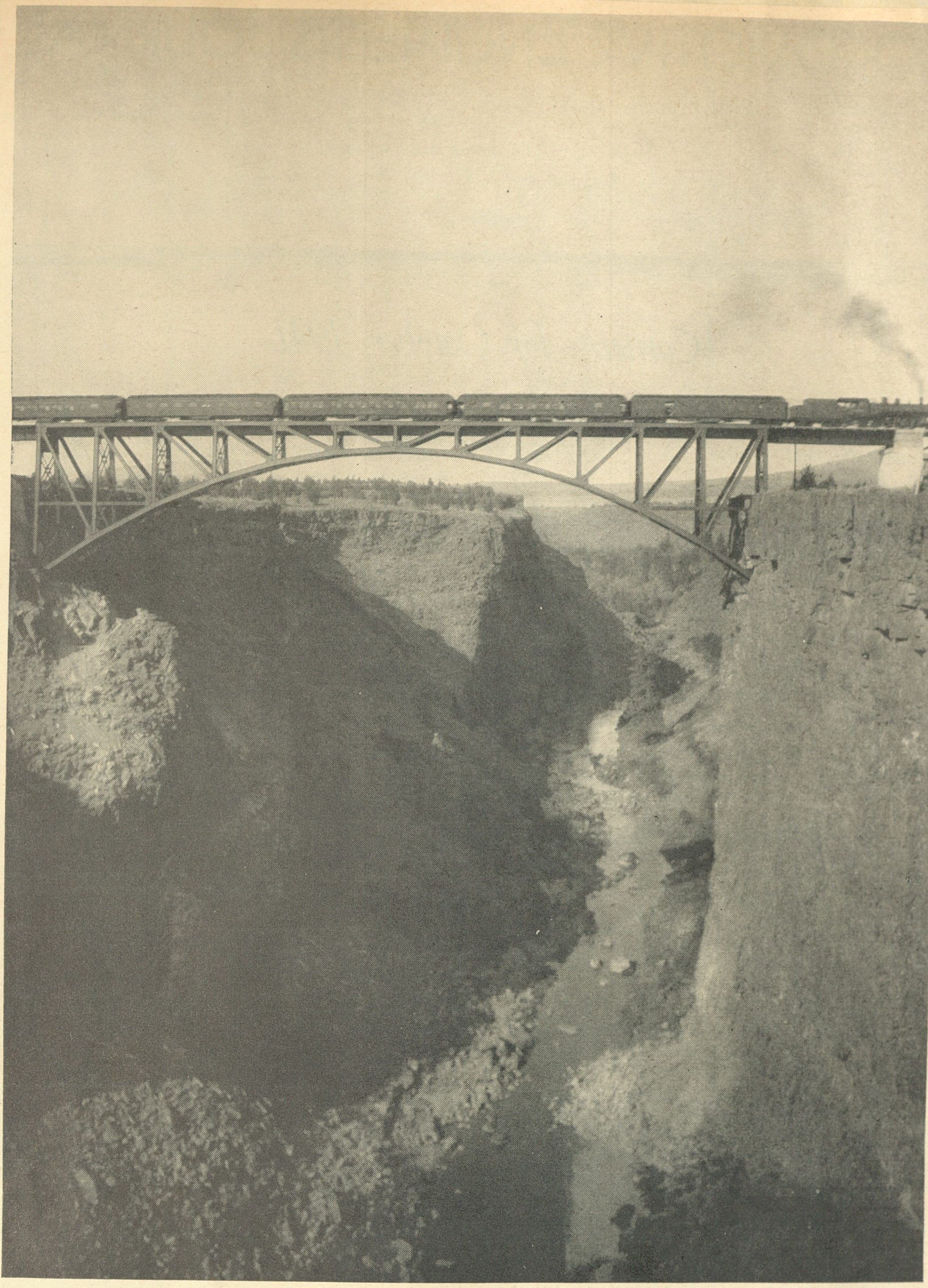




**OREGON TRUNK CANTILEVER,** designed by Ralph Modjeski, nears completion over Crooked River gorge in 1911. The 340-foot single arch towers 320 feet above the water and was highest single span in America when completed. Courtesy of Spokane, Portland & Seattle Ry.



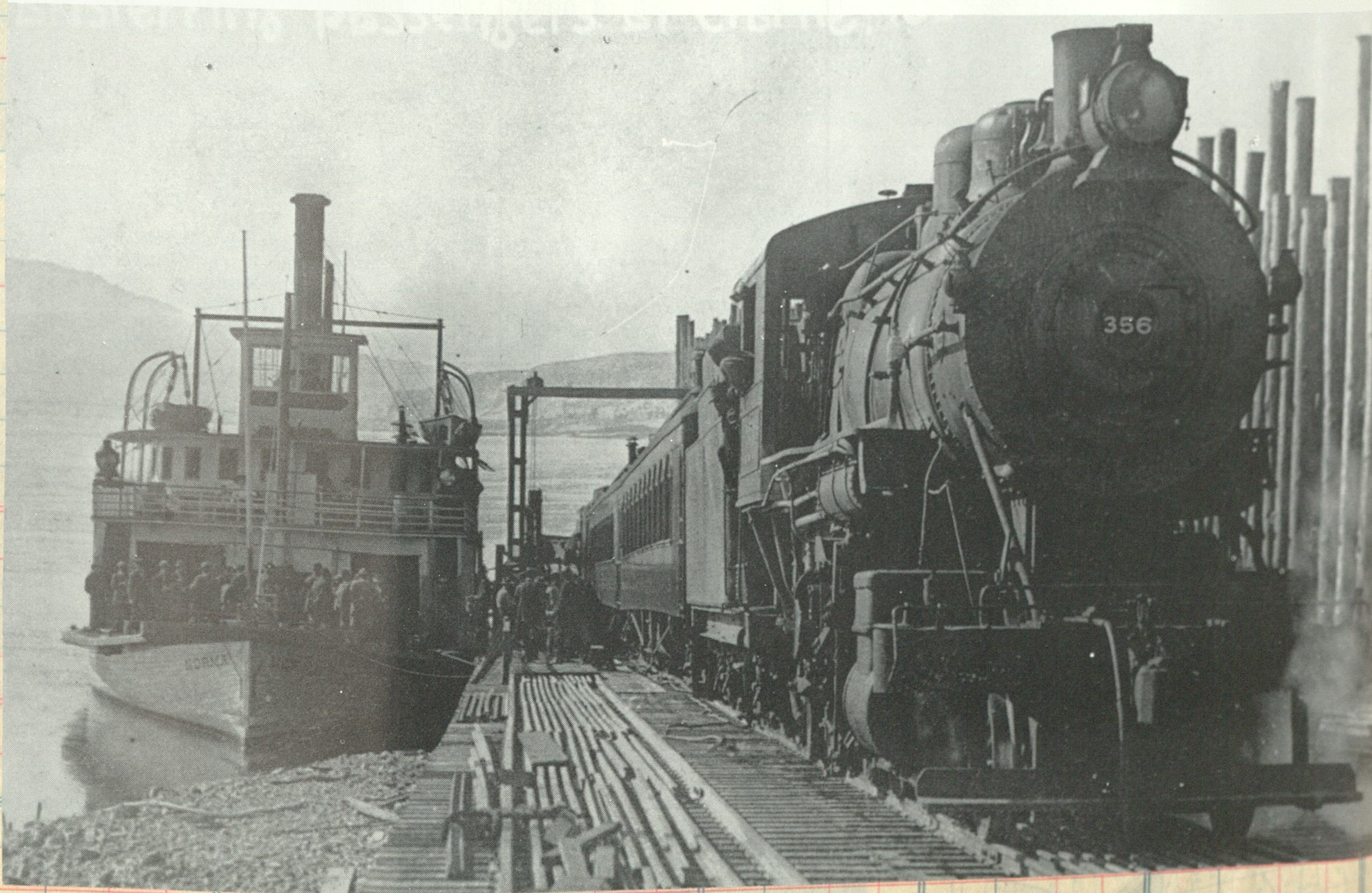
**HORSESHOE CURVE.** Hill and Harriman crews raced to lay their steel along the Deschutes, shown here near Sinamox station. Courtesy of Spokane, Portland & Seattle Ry.

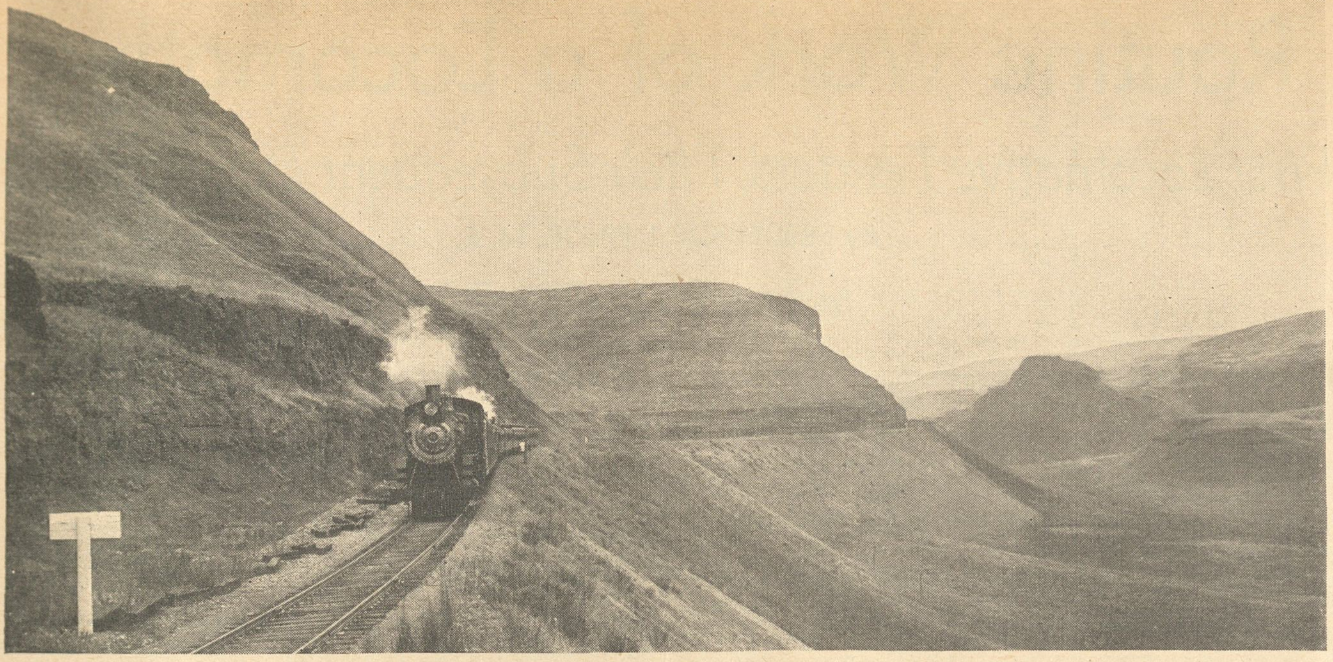


## *Spanning Nature's Beauty*

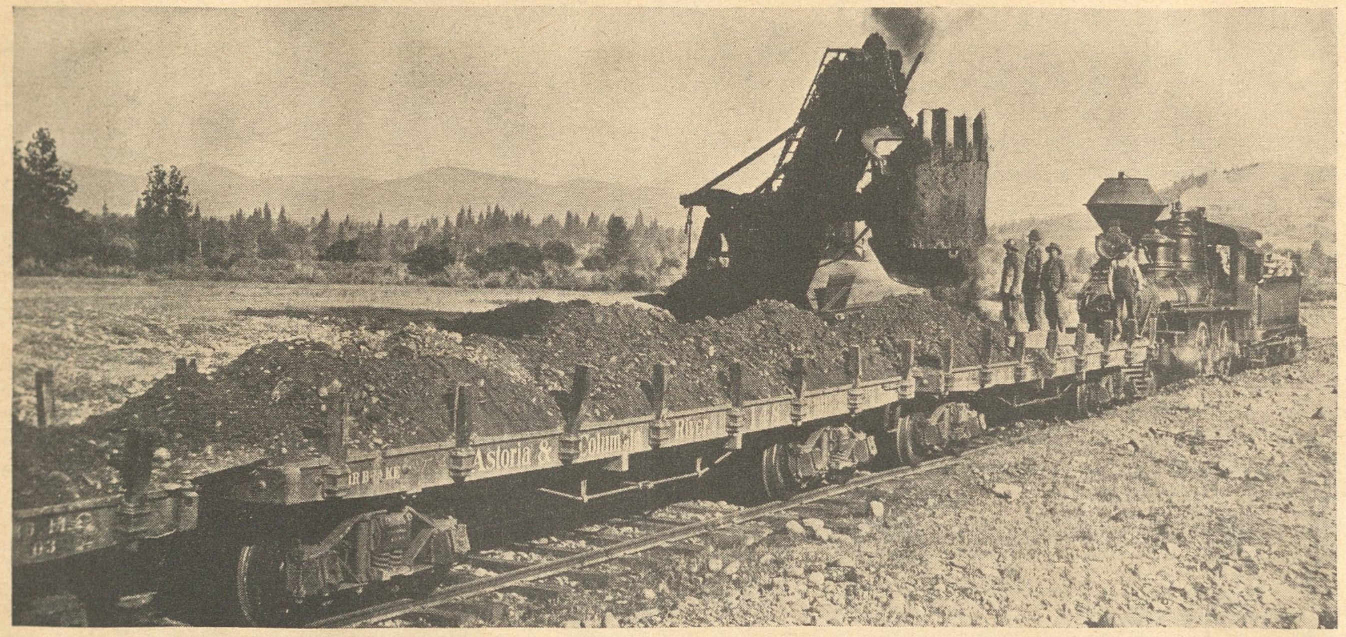
Appearing in the camera's eye as a miniature train this Spokane, Portland and Seattle Railroad train roars across this beauteous gorge wherein Nature has displayed in lavish hand.

**SPOKANE, PORTLAND & SEATTLE'S** No. 356 eases coaches down incline at Clarke to meet veteran Snake River and Upper Columbia River steamer, "NORMA." (Courtesy of E. D. Culp)



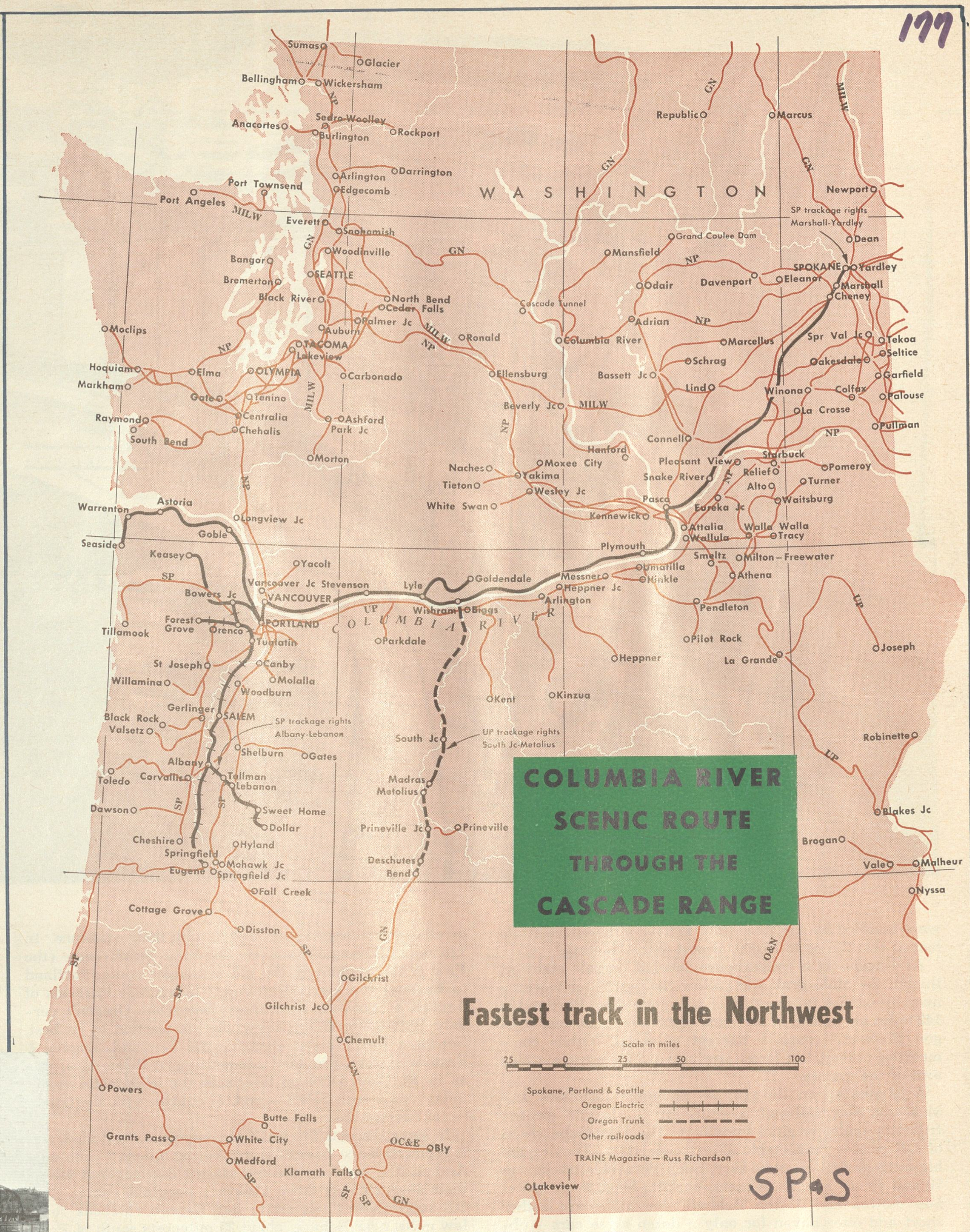


PASSENGER TRAIN OF THE SPOKANE, PORTLAND & SEATTLE IN THE FAMOUS DEVIL'S CANYON, STATE OF WASHINGTON



CONSTRUCTION TRAIN, ASTORIA & COLUMBIA RIVER RAILROAD

Photograph shows work being done on this branch of the Spokane, Portland & Seattle Railroad in 1897 between Astoria and Gable, Ore. Note the Columbia River in the background. The branch line, 61 miles in length, was opened in 1898.



COLUMBIA RIVER SCENIC ROUTE THROUGH THE CASCADE RANGE
WASHINGTON
COLUMBIA RIVER
Sumas
Glacier
Bellingham
Wickersham
Anacortes
Sedro Woolley
Burlington
Rockport
Arlington
Darrington
Edgecomb
Port Townsend
Port Angeles
Everett
Snohomish
Woodinville
Bangor
Bremerton
SEATTLE
North Bend
Cedar Falls
Black River
Palmer Jc
Auburn
TACOMA
Lakeview
OLYMPIA
Carbonado
Moclips
Hoquiam
Markham
Elma
Gate
Tenino
Centralia
Chehalis
Ashford
Park Jc
Raymond
South Bend
Morton
Ronald
Ellensburg
Cascade Tunnel
Columbia River
Beverly Jc
Republic
Marcus
Newport
SP trackage rights Marshall-Yardley
Dean
Grand Coulee Dam
Mansfield
Odair
Davenport
SPOKANE
Yardley
Eleanor
Marshall
Cheney
Adrian
Marcellus
Spr Val Jc
Tekoa
Seltice
Schrag
Bassett Jc
Lind
Oakesdale
Colfax
Garfield
Palouse
Winona
La Crosse
Pullman
Connell
Hanford
Pleasant View
Snake River
Starbuck
Pomeroy
Relief
Alto
Turner
Waitsburg
Naches
Moxee City
Yakima
Tieton
Wesley Jc
White Swan
Pasco
Kennewick
Eureka Jc
Attalia
Wallula
Walla Walla
Tracy
Smeltz
Milton-Freewater
Plymouth
Umatilla
Hinkle
Athena
Warrenton
Astoria
Seaside
Goble
Longview Jc
Keasey
Yacolt
Vancouver Jc
Stevenson
VANCOUVER
Lyle
Goldendale
Wishram
Biggs
Messner
Heppner Jc
Arlington
Bowers Jc
Forest Grove
Orenco
PORTLAND
Tualatin
Parkdale
Tillamook
Pendleton
Pilot Rock
La Grande
Joseph
Heppner
Kinzua
Kent
St Joseph
Canby
Molalla
Woodburn
Willamina
Black Rock
Valsetz
Gerlinger
SALEM
SP trackage rights Albany-Lebanon
UP trackage rights South Jc-Metolius
South Jc
Shelburn
Gates
Albany
Corvallis
Tallman
Lebanon
Toledo
Sweet Home
Dollar
Madras
Metolius
Dawson
Cheshire
Hyland
Springfield
Mohawk Jc
Springfield Jc
Eugene
Prineville Jc
Prineville
Deschutes
Bend
Fall Creek
Cottage Grove
Disston
Robinette
Blakes Jc
Brogan
Vale
Malheur
Nyssa
Gilchrist
Gilchrist Jc
Chemult
Powers
Butte Falls
Grants Pass
White City
Medford
Klamath Falls
Bly
Lakeview
GN
NP
MILW
SP
UP
O&N
OC&E

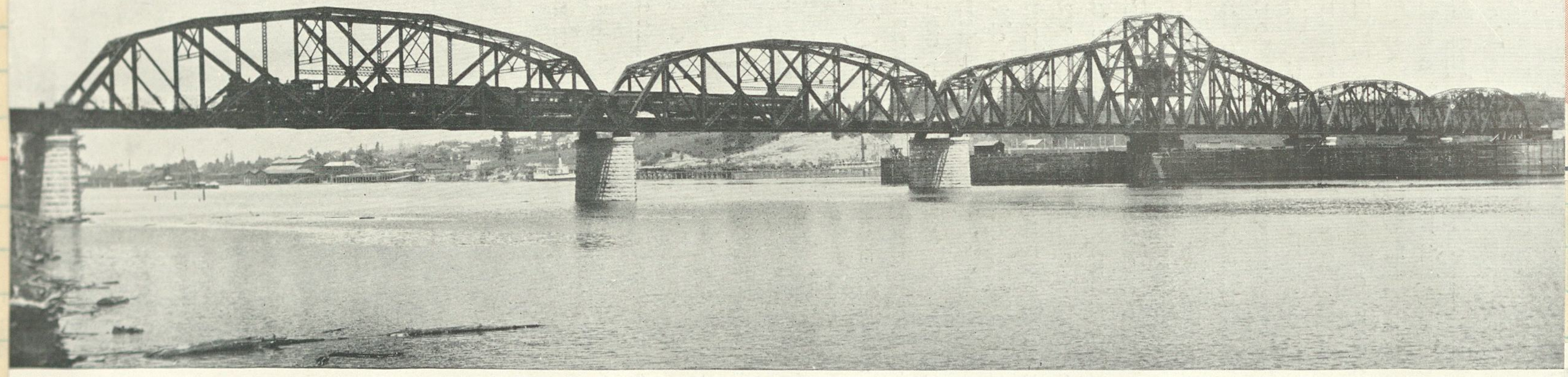
Fastest track in the Northwest

Scale in miles
25
0
25
50
100

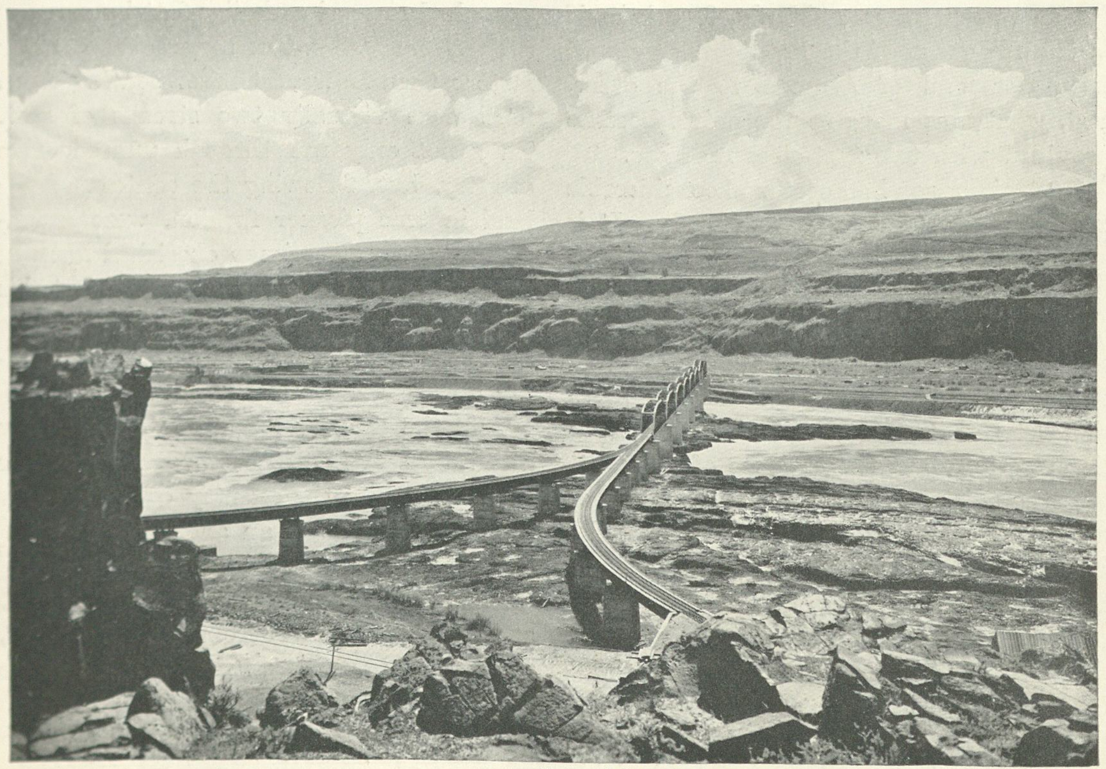
| | |
|---|---|
| Spokane, Portland & Seattle | ━━━ |
| Oregon Electric | ┼┼┼ |
| Oregon Trunk | ‒ ‒ ‒ |
| Other railroads | ─── |

TRAINS Magazine — Russ Richardson

SP&S



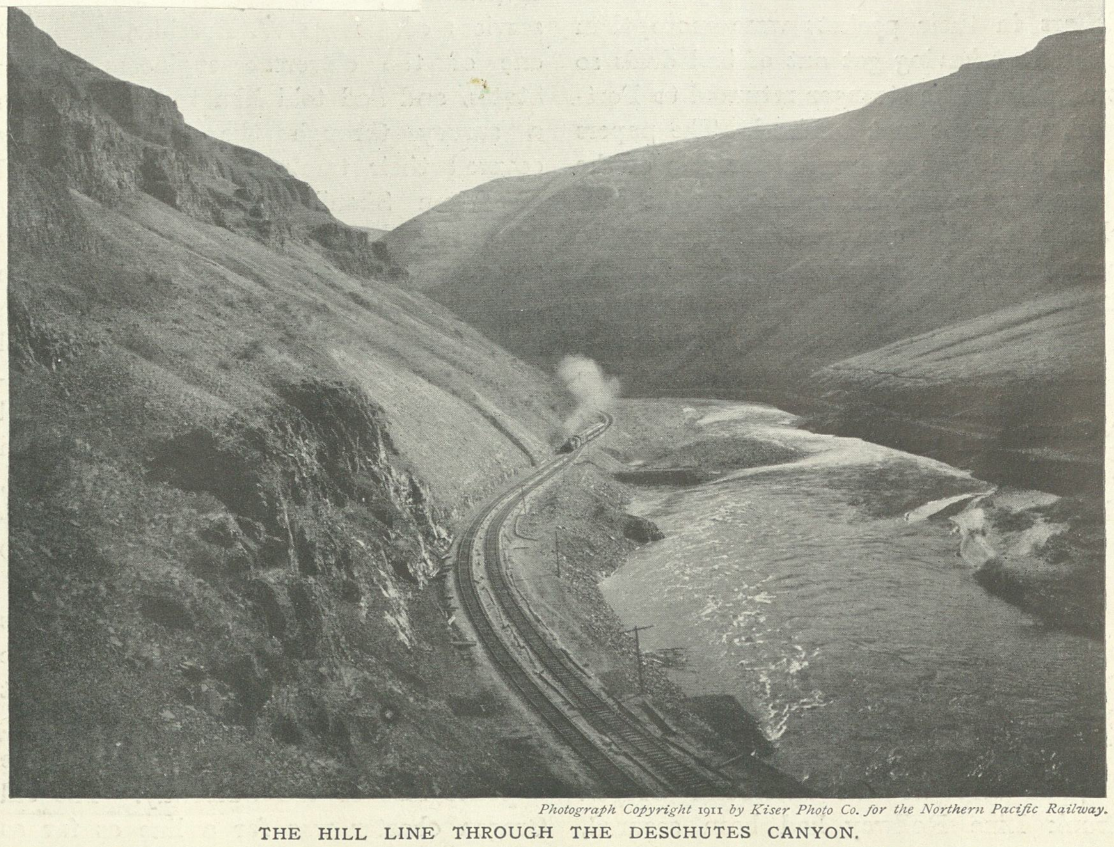
THE WILLAMETTE BRIDGE ACROSS THE COLUMBIA RIVER. IT HAS THE LONGEST DRAW-SPAN (521 FEET) IN THE WORLD.



*Photograph Copyright 1909 by Kiser Photo Co. for the Northern Pacific Railway.*

THE CELILO BRIDGE CROSSING THE FALLS OF THAT NAME UPON THE COLUMBIA RIVER TO ENABLE THE OREGON TRUNK LINE TO ESTABLISH A CONNECTION WITH THE NORTH BANK ROAD.

On the north side of the waterway the bridge has a V approach.

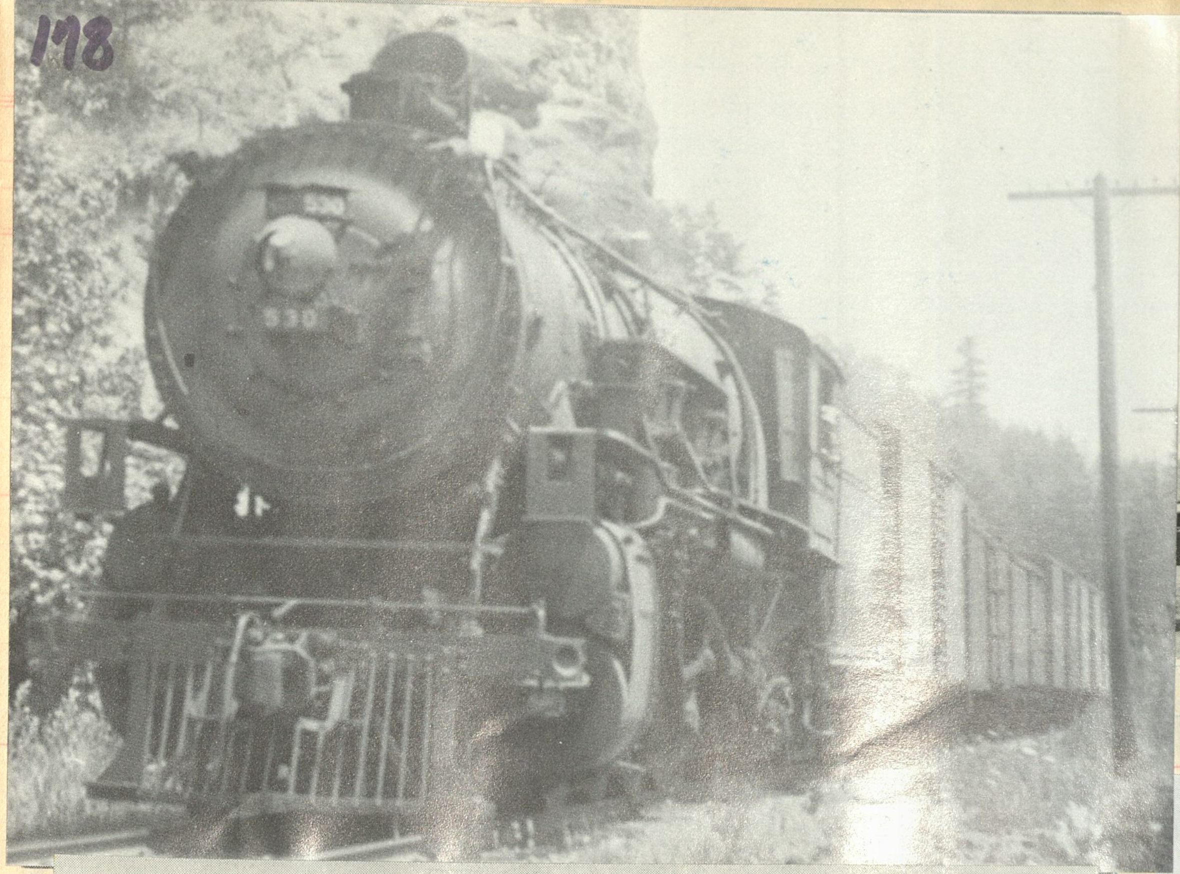


*Photograph Copyright 1911 by Kiser Photo Co. for the Northern Pacific Railway.*

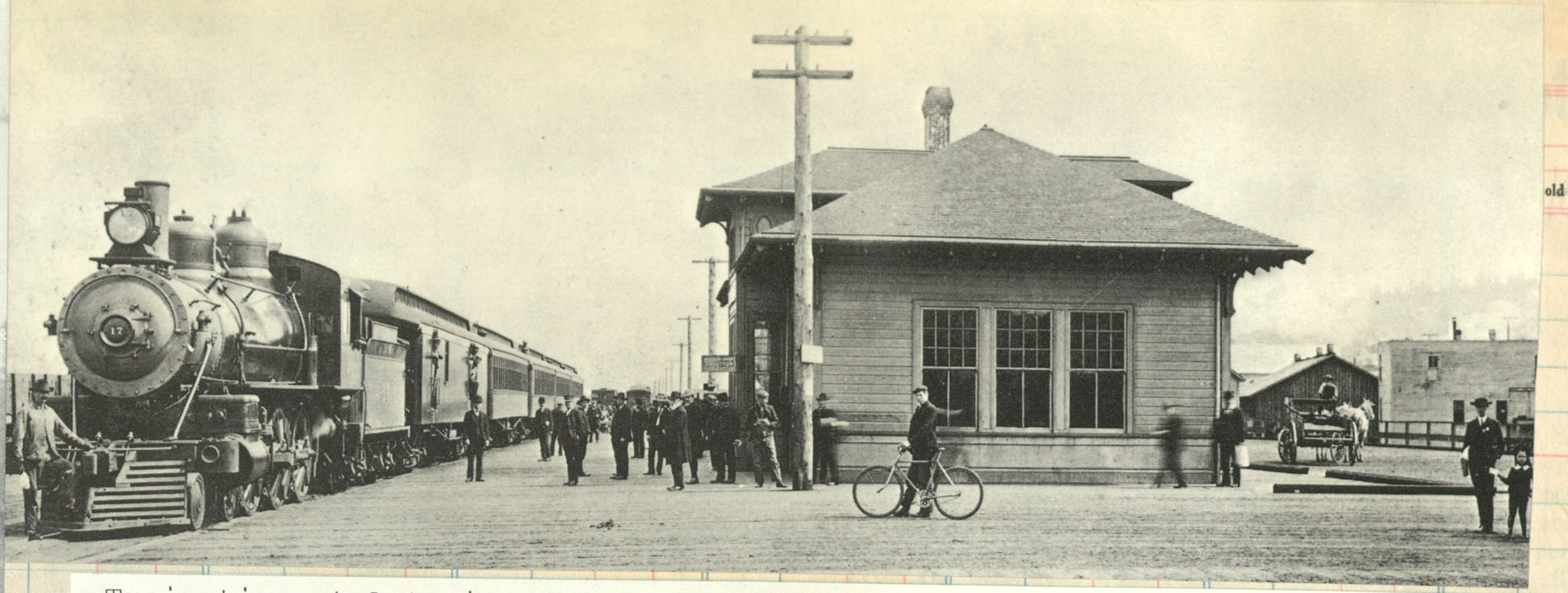
THE HILL LINE THROUGH THE DESCHUTES CANYON.

Hill and Harriman disputed the way through the Deschutes Canyon to penetrate Central Oregon. The result is that the Hill line shown in the picture follows the one and the Harriman road the other side of the river.

178

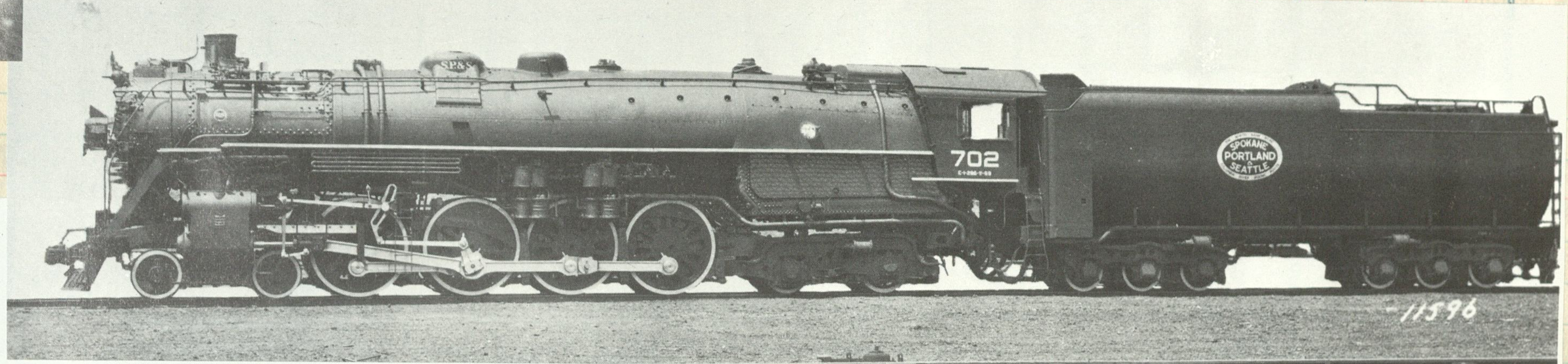


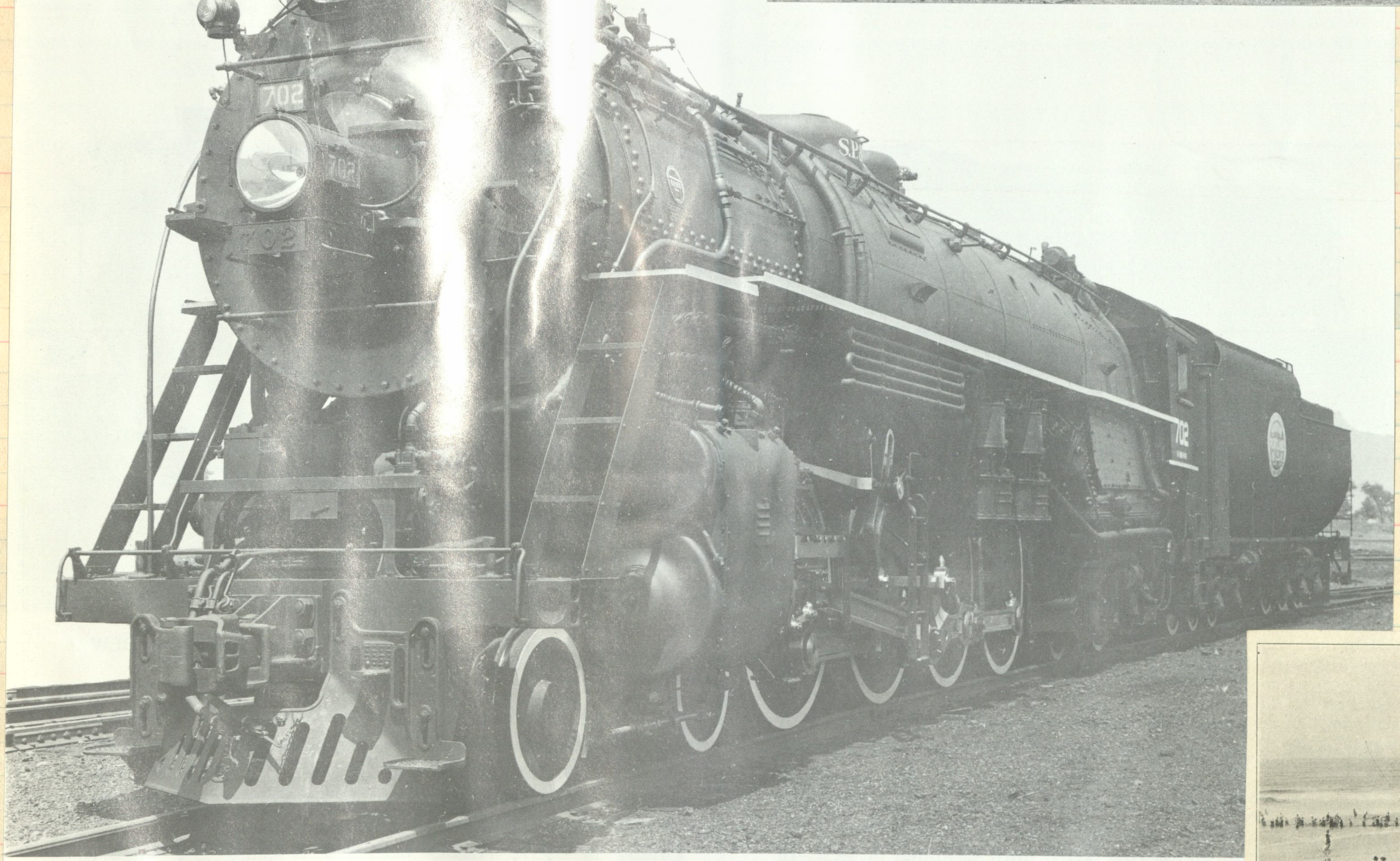
A westbound extra rumbles thru a tight cut near Stevenson, Wash. Eng 530, a Mike, was formerly Northern Pacific #1765, class W-3, constructed by Brooks in 1917. (c/n 57957)



Train time at Astoria. Power is A&CR #17, a 4-6-0 blt by Cooke in 1898. Later noed SP&S #154

old Amount Clos. No. Sold Amount





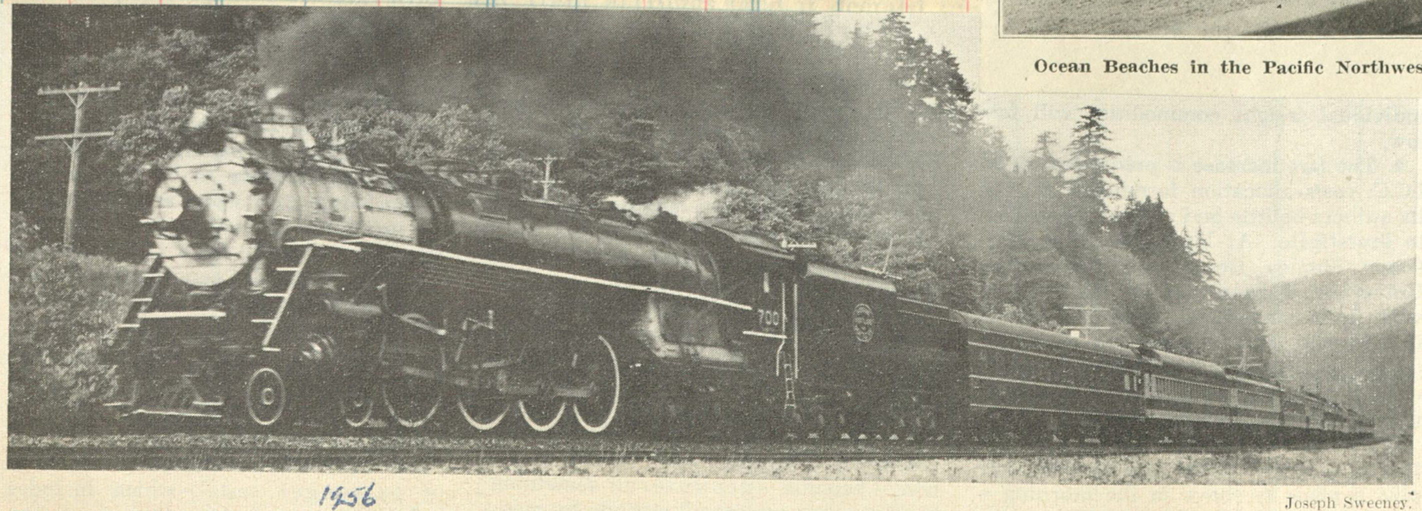
*September, 1938, finds the last engine of the class posing for the company photographer at the Baldwin plant in Philadelphia, Pa. The E-1's were* equipped to burn oil./BLW Photo, H.L. Broadbelt coll

| SPOKANE, PORTLAND AND SEATTLE RY. 4-8-4 ROSTER | |
|---|---|
| CLASS | E-1 |
| NUMBERS | 700 to 702 |
| BUILDER & DATE | Baldwin, 1938 |
| WHEELBASE | 96′-11″ |
| DRIVER DIA. | 77″ |
| BOILER PRESSURE, lbs. | 260 |
| CYLS., BORE & STROKE | 28″×31″ |
| VALVE GEAR | Walscharets |
| FEEDWATER HEATER SYSTEM | Worthington Type 6-SA |
| REVERSE GEAR | Alco-Type G |
| SUPERHEATER | Type E |
| CAPACITIES: | |
| Oil—Gals. | 6,000 |
| Water—Gals. | 20,000 |
| WEIGHTS | |
| On Drivers | 296,500 |
| Loco | 485,820 |
| Loco & Tender | 865,520 |
| TRACTIVE EFFORT | 69,800 lbs. |

SP&S

Ocean Beaches in the Pacific Northwest Lure Thousands of Summer Visitors. This One at Seaside, Ore., is Typical. Reached b Union Pacific and O. R. & N. Ry.

Total
Add—Error ____________ DATE
Deduct " ____________ DATE
Total
Add Working Fund
Total to be Accounted for
Cash to Agent
Agent's Signature
Cash to next Seller
Next Seller's Signature
Total Accounted for



Joseph Sweeney.

1956

STEAM GOT A REAL SEND-OFF May 20 when Spokane, Portland & Seattle operated 4-8-4 No. 700 on excursion to signify last steam passenger run.

MOUNT SIR DONALD

The Soo-Dominion

**EQUIPMENT**

Parlor and Dining Car, Chicago, St. Paul and Minneapolis. (AC)
Standard Drawing Room Compartment Sleeper, St. Paul, Minneapolis and Vancouver. (AC)
Tourist Sleeper, St. Paul, Minneapolis and Vancouver.
Lounge Car — Dining Car — Coaches.

(AC) Regularly assigned cars AIR-CONDITIONED

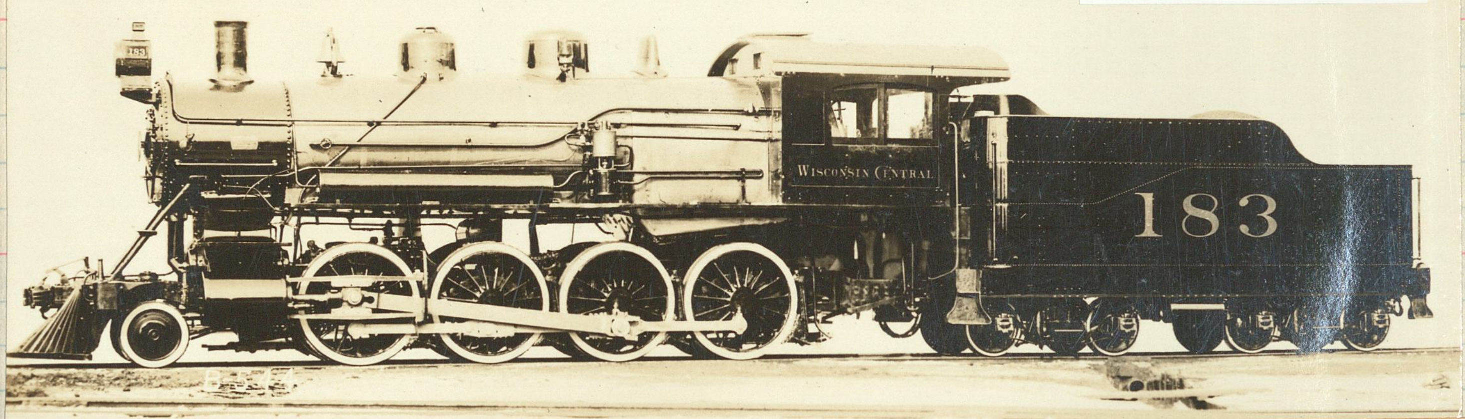
SOO LINE

WISCONSIN CENTRAL

Minneapolis, St. Paul & Sault Ste. Marie Railroad Company

*Wisconsin Central*

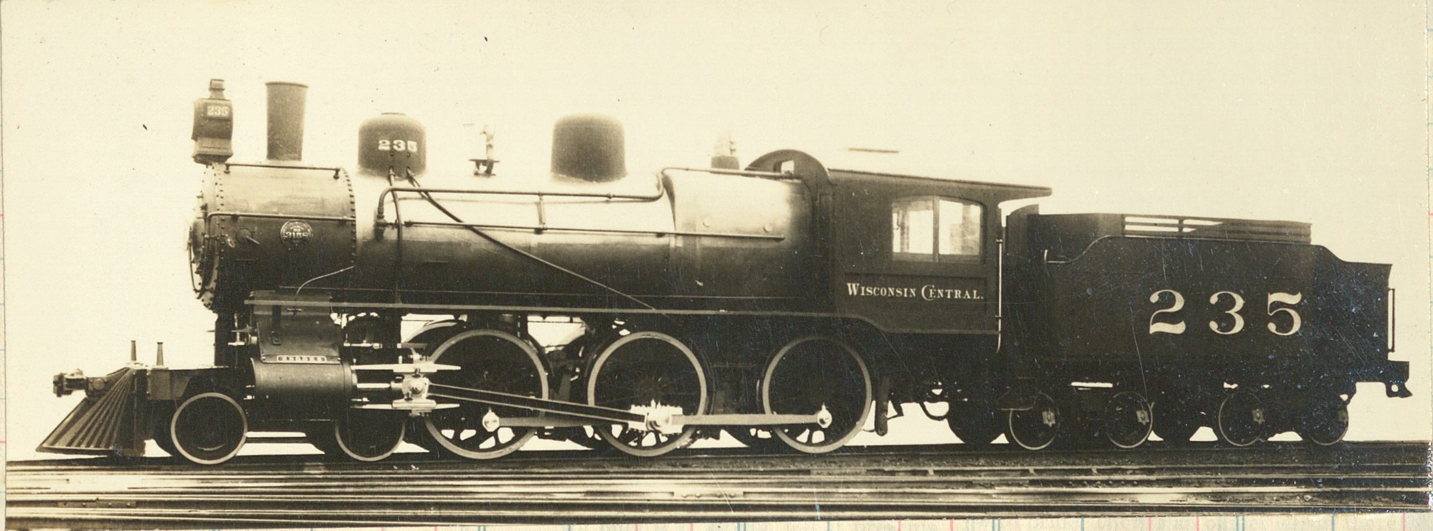
Renoed Soo 2423
c/n 45114



Wisconsin Central 183, one of eight [177-184] Consolidations built by Brooks 1908

Wisconsin Central (now Soo) began painting all its passenger and freight stations and all its rolling stock a rich yellow. Said *Railroad Gazette*, "If this is the same shade of yellow used by the Big Four and the Chesapeake & Ohio east of Chicago, Mr. Ingalls ought to pay the Wisconsin Central something for the advertisement. Everybody looks upon yellow tank-houses and cattle pens as sure indications that one is on or near 'an Ingalls road,' and passengers coming from St. Paul to Chicago over the Wisconsin Central, bound for the East, will now be sure to continue their journey over the Big Four. After 400 miles of yellow the hypnotic effect will, no doubt, be proof against the wiles of all competing passenger agents at Chicago. The reporters call the Wisconsin Central 'the Golden Rod Line.'" Nov 1898

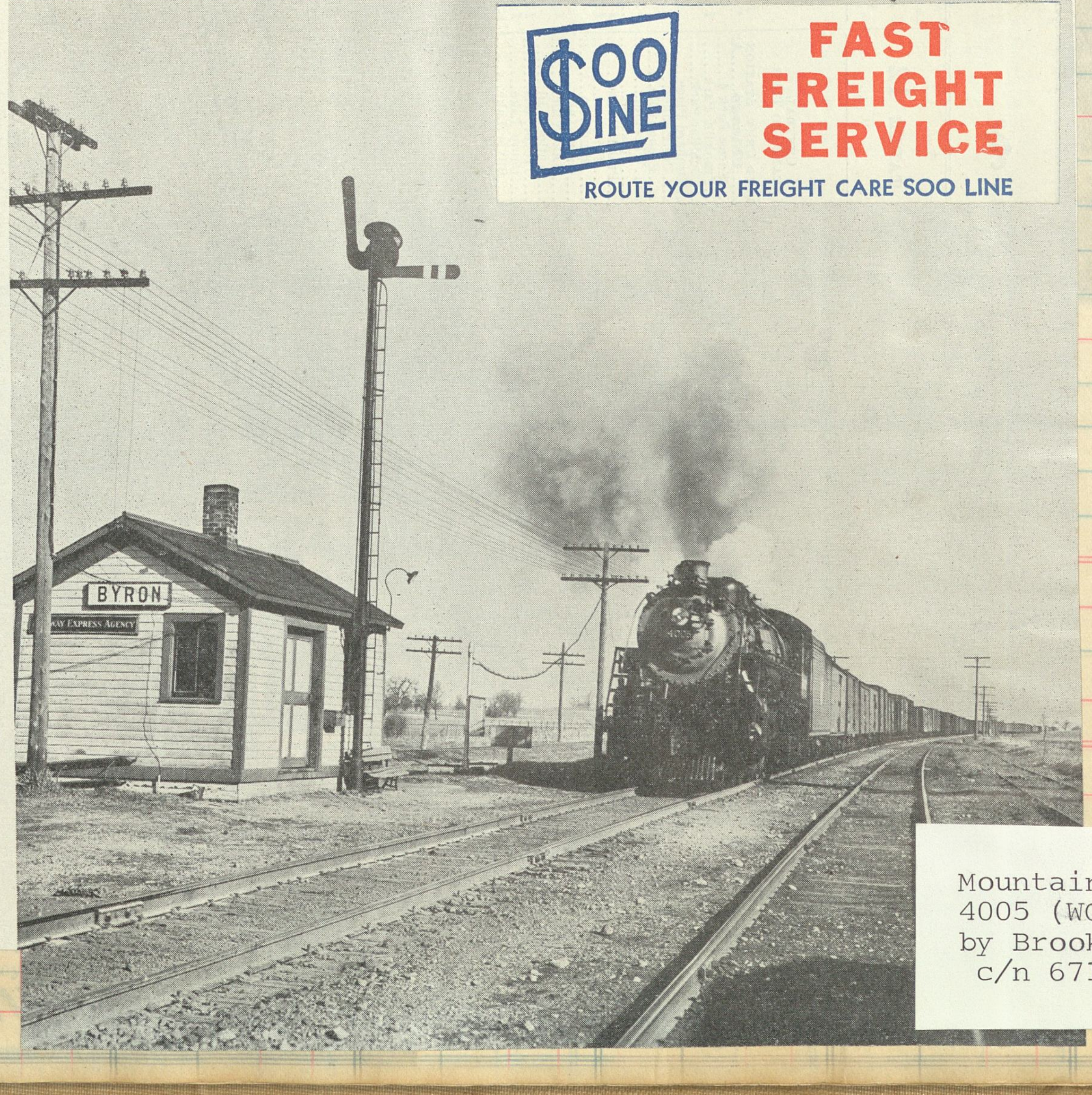
In 1899 Brooks delivered
seven 10 wheelers to the
Wisconsin Central. Noed
231-237. Later became
Soo Line 2629-2635
c/n 3158



In 1927 was operating 4,401 miles with 510 engines, 25,858 freight and 453 passenger cars.

SOO LINE
FAST FREIGHT SERVICE
ROUTE YOUR FREIGHT CARE SOO LINE

The Minneapolis, St. Paul & Sault Ste. Marie Railroad, better known as the Soo Line, is Canadian Pacific's largest independently operated railroad subsidiary, operating more than 4250 miles of line in the spring wheat states of Minnesota and North Dakota and eastward through Wisconsin and Michigan to Sault Ste. Marie, where connections are made with the parent company. Through lease of the Wisconsin Central entrance was gained to Chicago in 1909, and since 1932 the Soo has operated the Wisconsin Central as agent for the receiver. Time freight No. 24 approaches Byron, Wis., south of Fond du Lac on WC line.

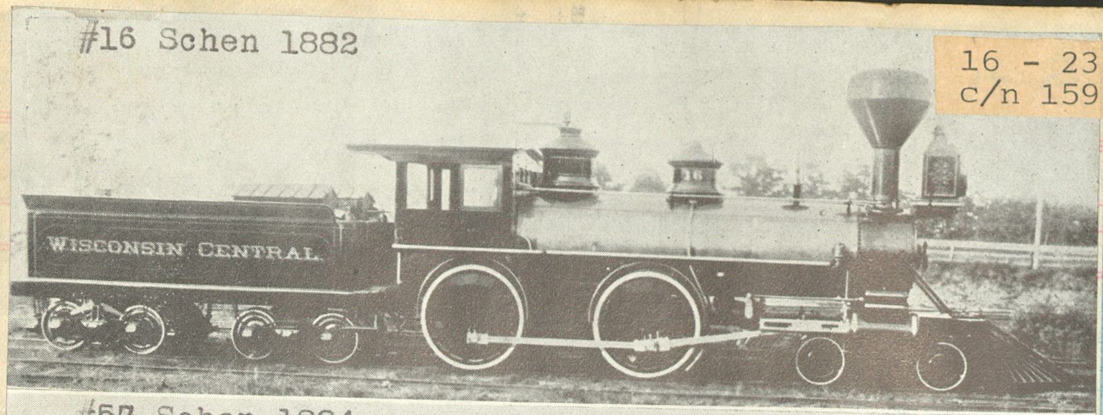


Mountain type
4005 (WC) blt
by Brooks 1926
c/n 67122

### Now part of Soo.

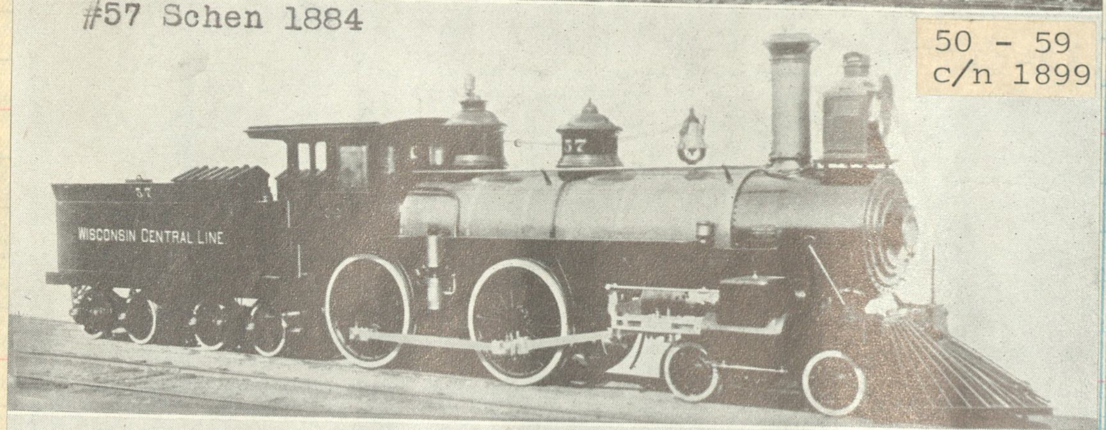
The Wisconsin Central is now a portion of the Minneapolis, St. Paul & Sault Ste. Marie Railway, better known as the Soo Line. The Soo obtained control in 1909 through the purchase of 51 per cent of the common stock, and the property was leased to the Soo for 99 years. In 1924 the Soo acquired practically all of the outstanding minority common stock.

On December 2, 1932, a receiver was appointed for the Wisconsin Central and on the following day the receiver executed an operating agreement with the Soo, under which the Soo has continued to operate the properties as agent for the receiver.



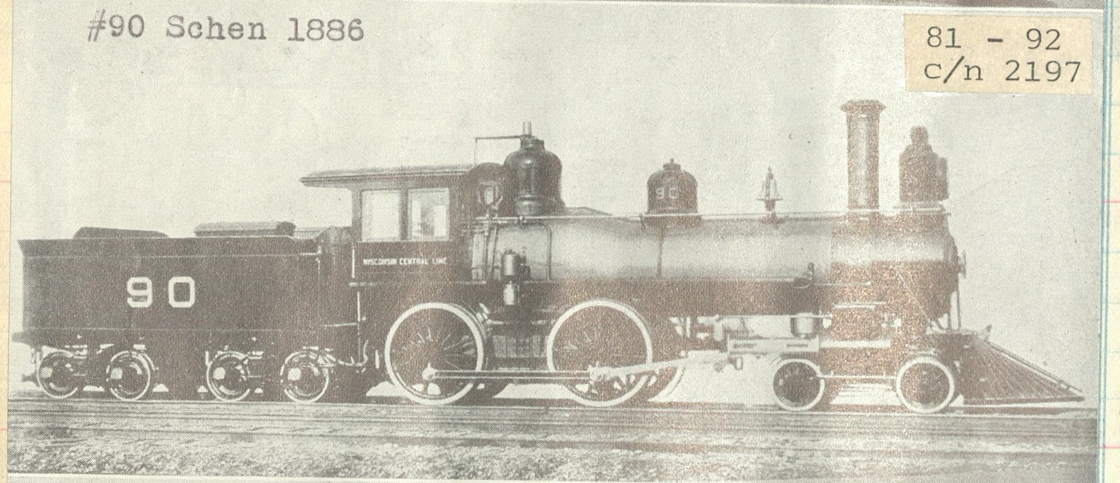
#16 Schen 1882

16 - 23
c/n 1598



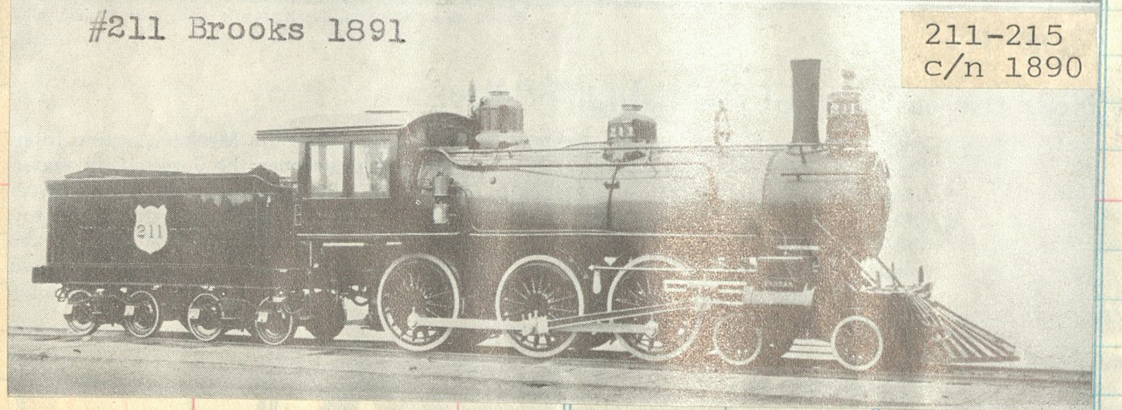
#57 Schen 1884

50 - 59
c/n 1899



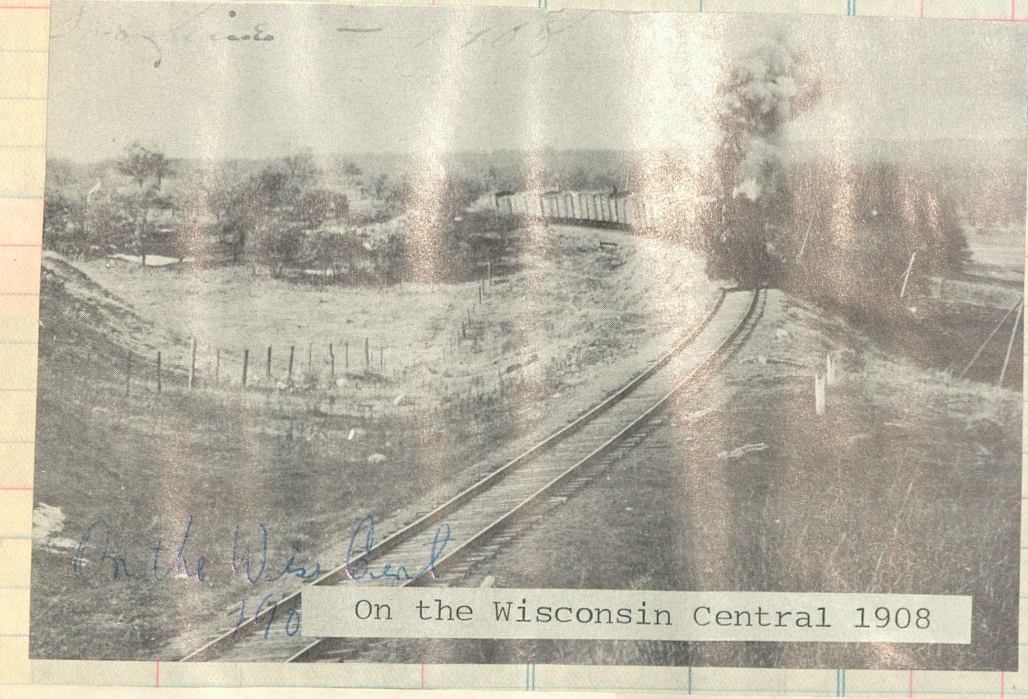
#90 Schen 1886

81 - 92
c/n 2197



#211 Brooks 1891

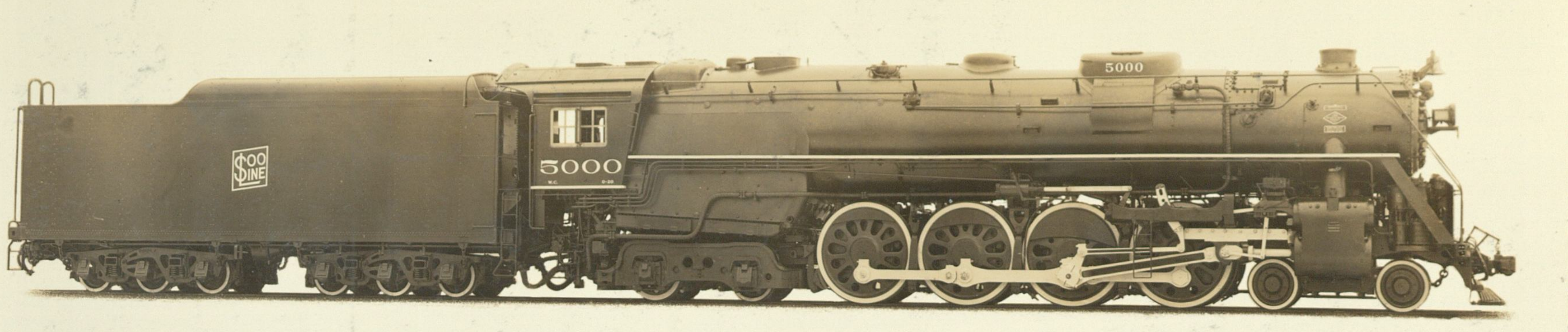
211-215
c/n 1890



On the Wis Cent
190

On the Wisconsin Central 1908

Foto gift of John Keller
Lima Locomotive Works



WISCONSIN CENTRAL

Typical of the superb power built at Lima were four handsome Northerns delivered to the Soo Line [Wisconsin Central] in 1938. c/n's 7753-7756 and noed 5000-5003. Class 0-20 with cyls 26x32 dvs 75" TF 79,400#. These were the last Soo engines.

**CHICAGO-MILWAUKEE-ST. PAUL-MINNEAPOLIS**

**Morning Trains**

**Trains Nos. 1 and 2, daily**

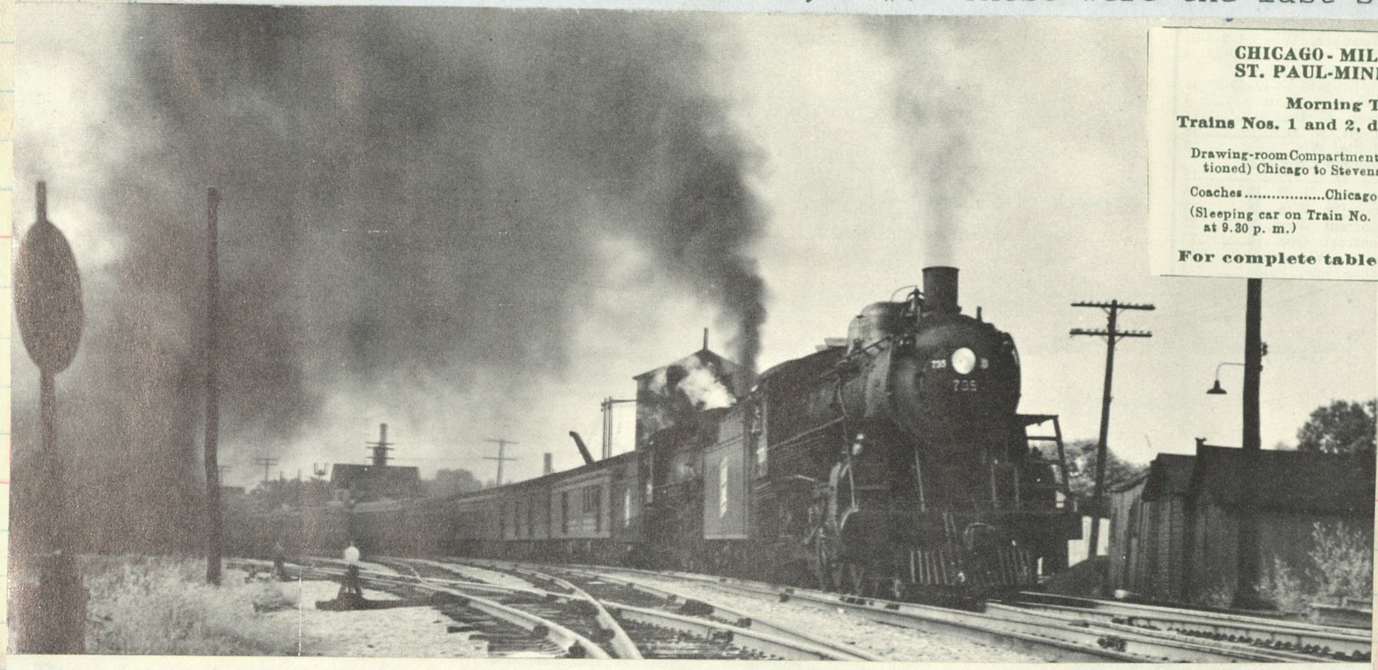
Drawing-room Compartment Sleeper Air-Conditioned) Chicago to Stevens Point on Train No. 1

Coaches..................Chicago and Twin Cities

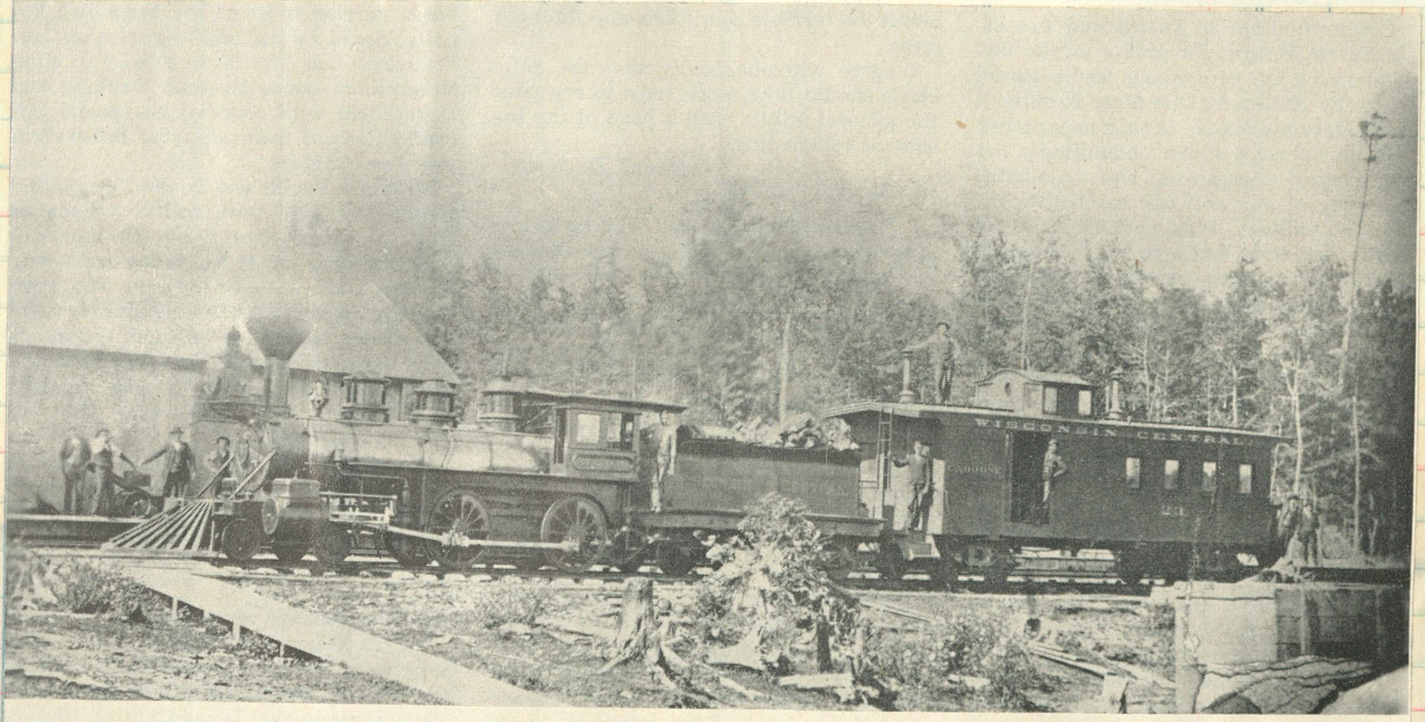
(Sleeping car on Train No. 1 ready for occupancy at 9.30 p. m.)

**For complete table see pages 3-4**

| 1 | 1938 | 2 |
|---|---|---|
| A. M. | | P. M. |
| *12.20 | Lv.....Chicago.....Ar | 10.30 |
| 3.07 | ......Burlington...... | 8.01 |
| 4.07 | .......Waukesha....Lv | 7.02 |
| 6.10 | ......Fond du Lac...... | 5.17 |
| 6.57 | ........Oshkosh....... | 4.34 |
| 7.28 | ........Neenah........ | 4.09 |
| ‖ 9.50 | .....Stevens Point..... | ‖ 2.23 |
| 10.50 | ...... Marshfield ...... | 1.20 |
| 4.15 | Ar.....St. Paul.....Lv | 8.20 |
| ■4.55 | Ar...Minneapolis...Lv | * 7.30 |
| P. M. | ■ Arrive G. N. Ry. station in Minneapolis | A. M. |

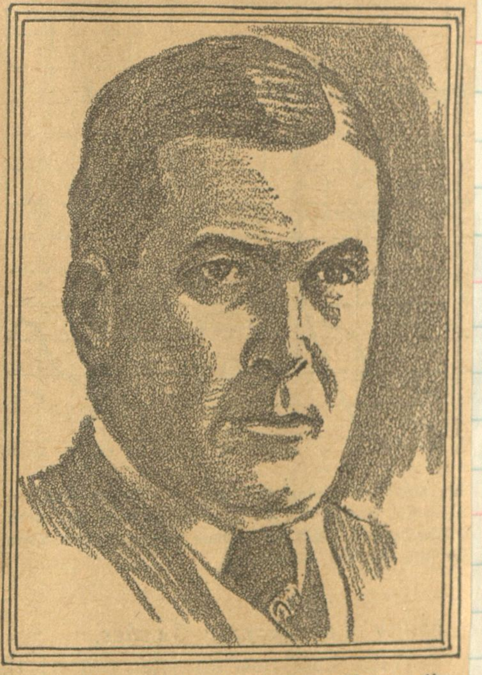


No. 2 double heads out of Fond du Lac on the Wisconsin Central



Both photos, R. L. Martin, from George Banta Jr.

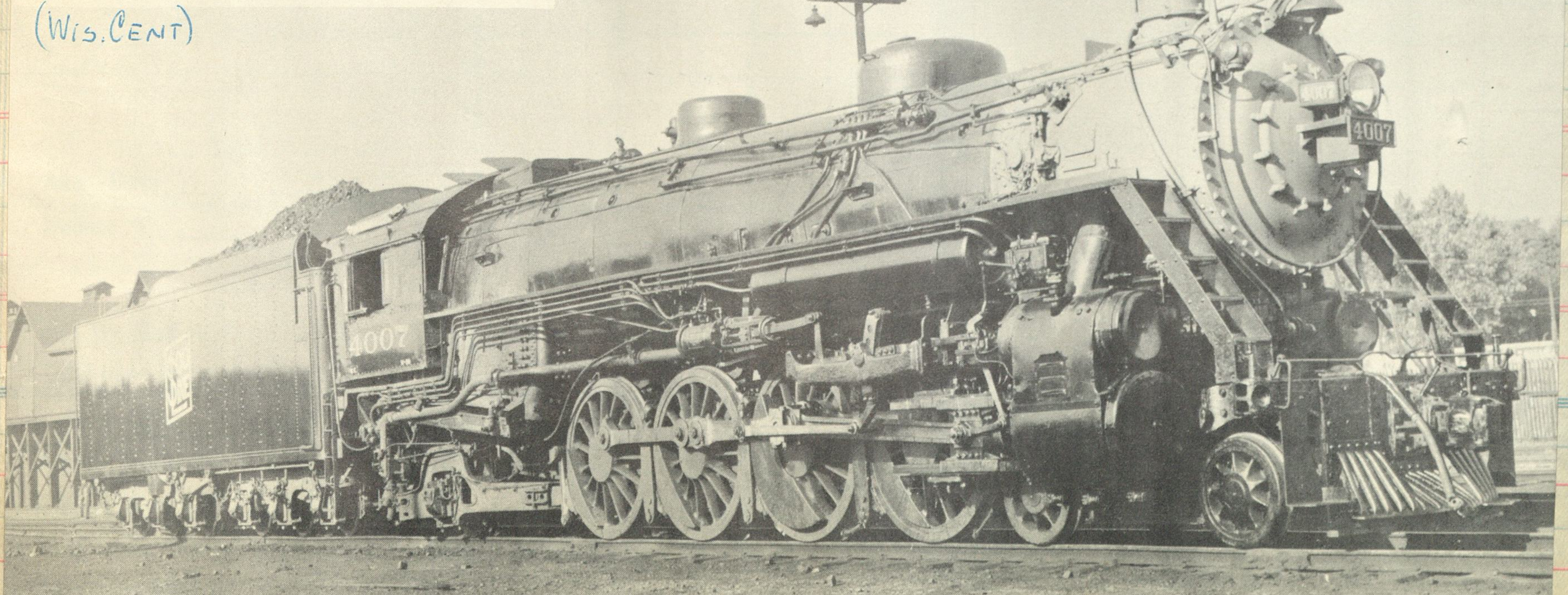
The Wisconsin Central was a forebear of the present-day Soo Line. Engine No. 3 and side-door caboose No. 23 drew up in front of the station at Ogema, Wis., in 1881 to have this picture taken. Domes of the locomotive, a wood-burner built by Baldwin in 1871, were sheathed with brass.



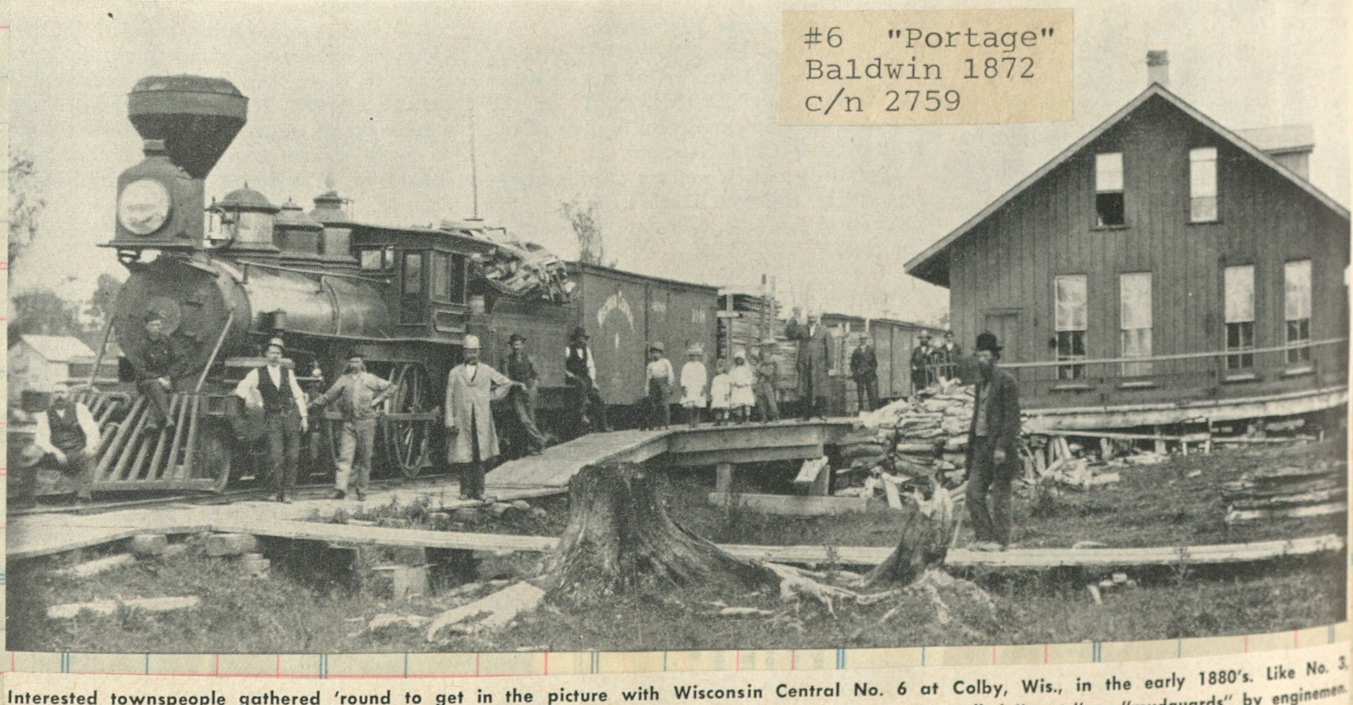
The Soo Was not the Work of One Man, as the Great Northern Was of Jim Hill; but Edmund Pennington Came Closest to Being the Soo's Jim Hill. Superintendent in 1886 (After Coming from the Milwaukee), He Succeeded Underwood as General Manager in 1899, Was President of the Whole System from 1909 to 1922 and Chairman of the Board until He Died in 1926. He Planned and Built Most of the Soo's Mileage and Terminals, and Ruled It Through Its Short but Pleasant Golden Age

**No. 4007.** These fast, versatile "Mountain Type" freight and passenger engines have operated on the Soo rails since 1926. They were built by Dunkirk and Schenectady, and some by the Soo Line. They will probably be among the last to be replaced.

(Wis. Cent)



#6 "Portage"
Baldwin 1872
c/n 2759



Interested townspeople gathered 'round to get in the picture with Wisconsin Central No. 6 at Colby, Wis., in the early 1880's. Like No. 3, engine 6 was a Baldwin wood-burner with lots of brass ornamentation. Shrouds over drivers were called "pants" or "mudguards" by enginemen.

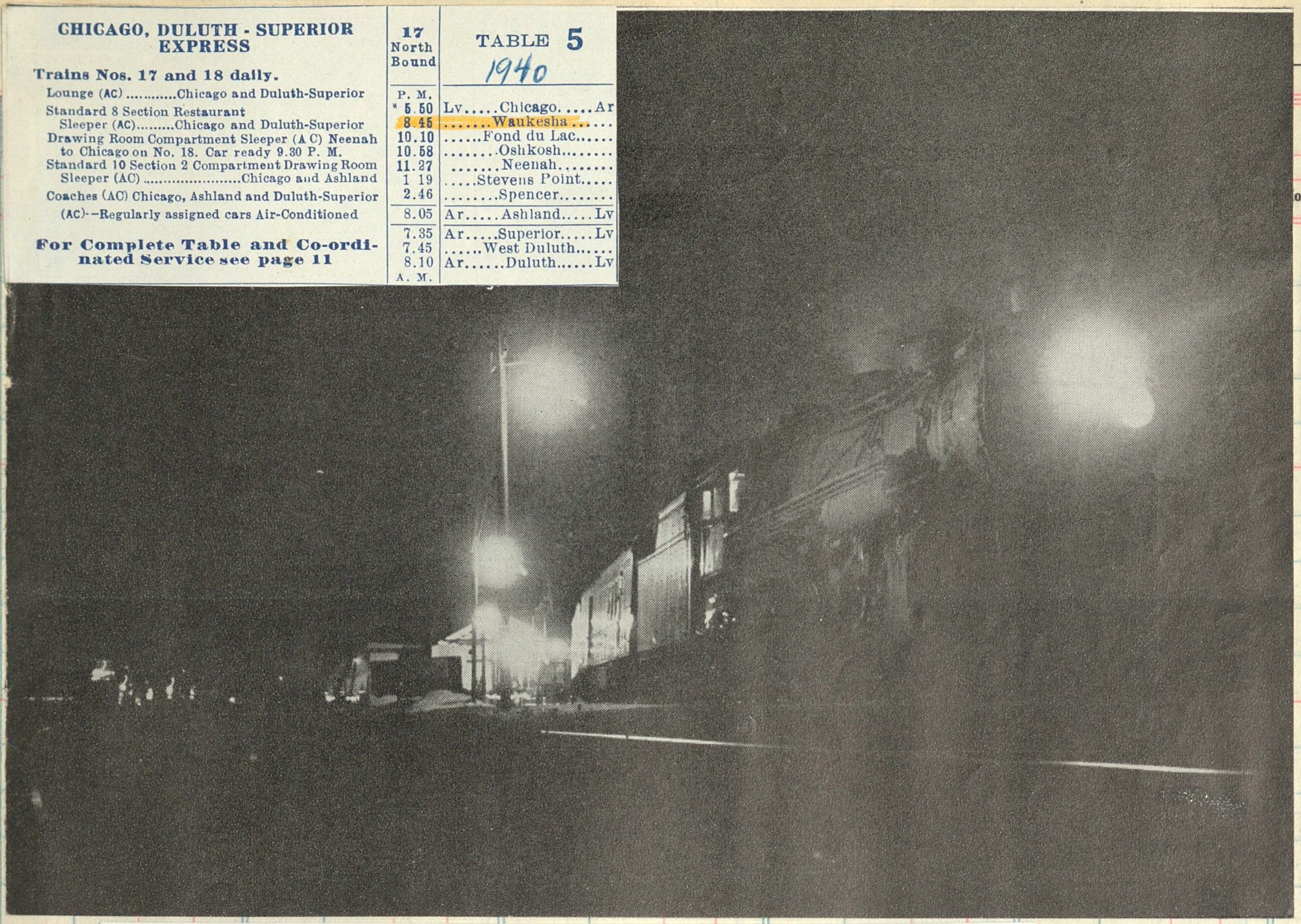
**CHICAGO, DULUTH - SUPERIOR EXPRESS**

**Trains Nos. 17 and 18 daily.**

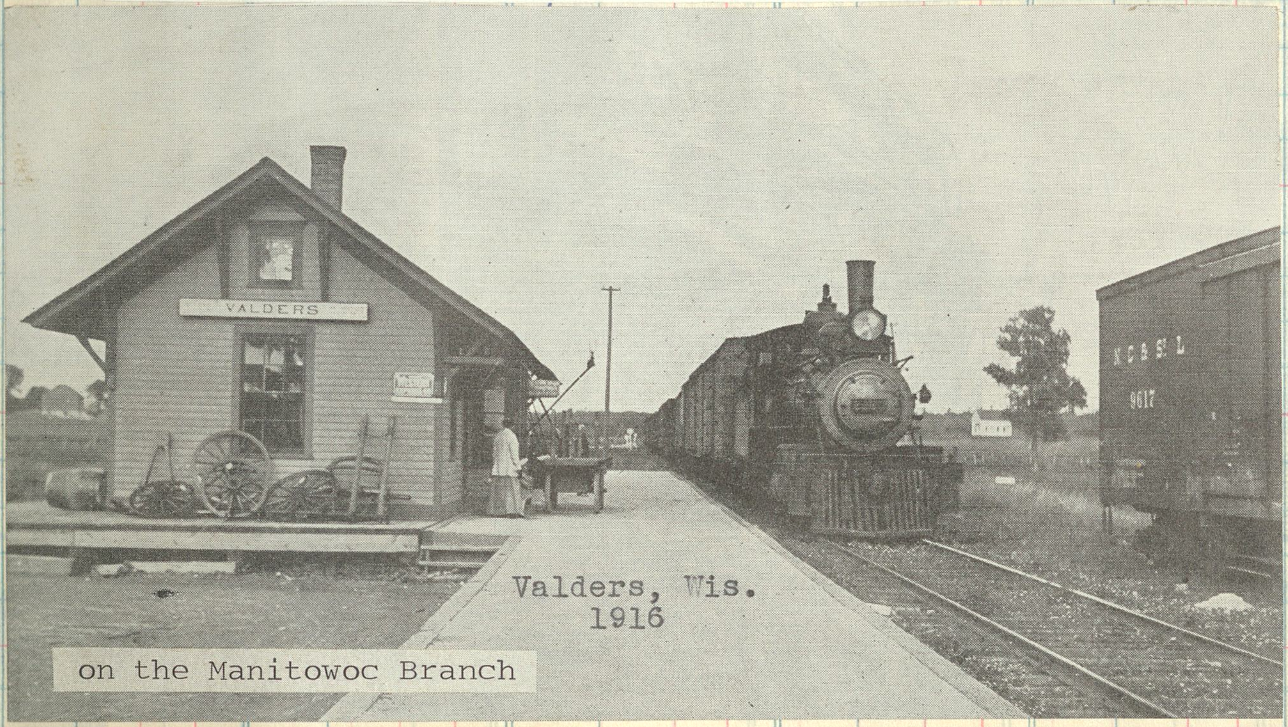
Lounge (AC) ............Chicago and Duluth-Superior
Standard 8 Section Restaurant Sleeper (AC).........Chicago and Duluth-Superior
Drawing Room Compartment Sleeper (A C) Neenah to Chicago on No. 18. Car ready 9.30 P. M.
Standard 10 Section 2 Compartment Drawing Room Sleeper (AC) .....................Chicago and Ashland
Coaches (AC) Chicago, Ashland and Duluth-Superior
(AC)--Regularly assigned cars Air-Conditioned

**For Complete Table and Co-ordinated Service see page 11**

| 17 North Bound | TABLE 5 1940 |
|---|---|
| P. M. | |
| * 5.50 | Lv.....Chicago.....Ar |
| 8.45 | .......Waukesha....... |
| 10.10 | ......Fond du Lac...... |
| 10.58 | ........Oshkosh........ |
| 11.27 | .......Neenah........ |
| 1 19 | .....Stevens Point..... |
| 2.46 | ........Spencer........ |
| 8.05 | Ar.....Ashland.....Lv |
| 7.35 | Ar.....Superior.....Lv |
| 7.45 | ......West Duluth...... |
| 8.10 | Ar......Duluth......Lv |
| A. M. | |



No. 17 at Waukesha, Wis.

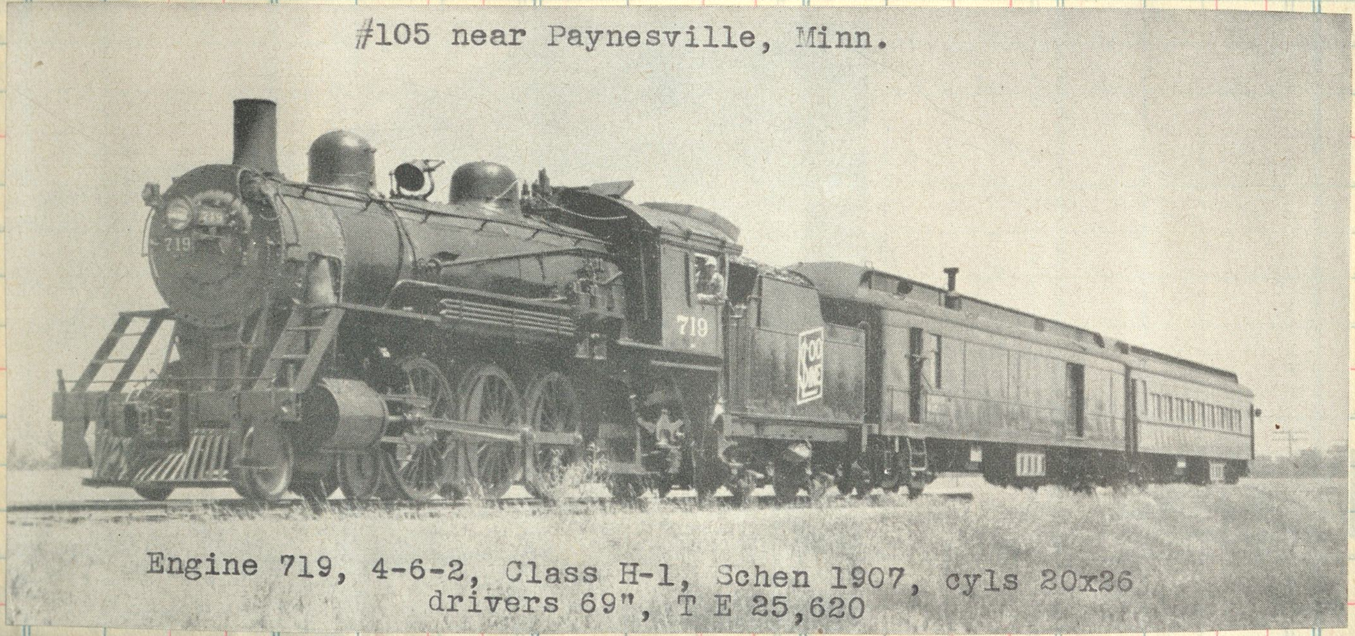


Valders, Wis.
1916

on the Manitowoc Branch

St Paul - Enderlin local

#105 near Paynesville, Minn.

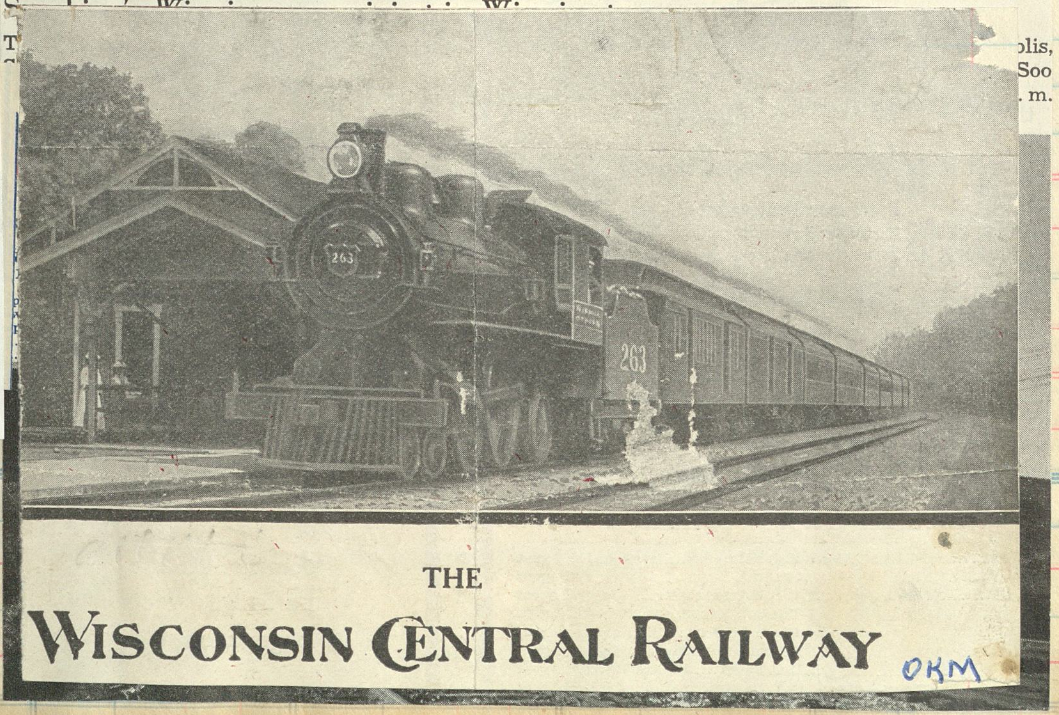


Engine 719, 4-6-2, Class H-1, Schen 1907, cyls 20x26
drivers 69", T E 25,620

The 263, an Atlantic type built by Brooks in 1902 c/n 26570

Later Soo Line 2906

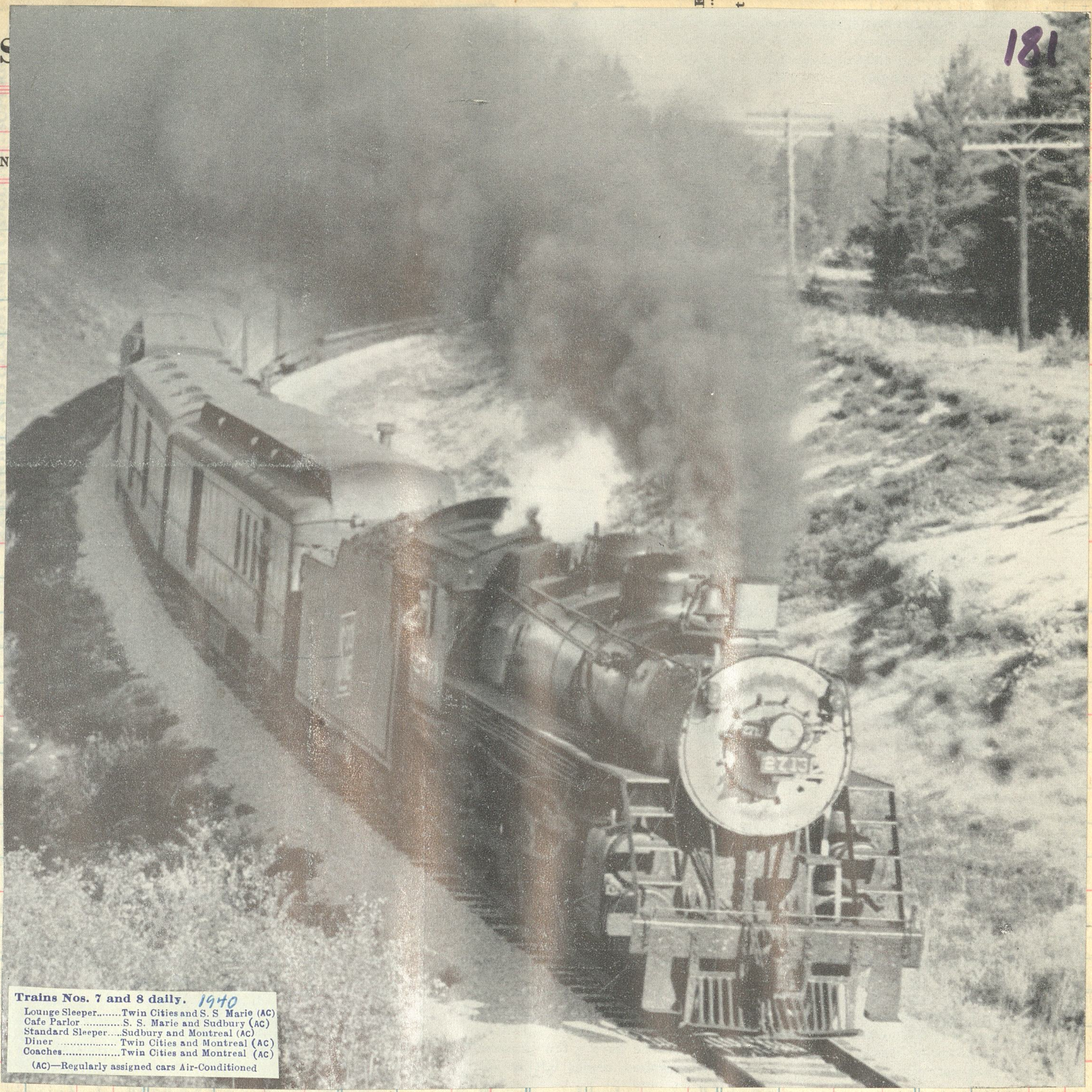
olis,
Soo
. m.



THE

WISCONSIN CENTRAL RAILWAY

OKM

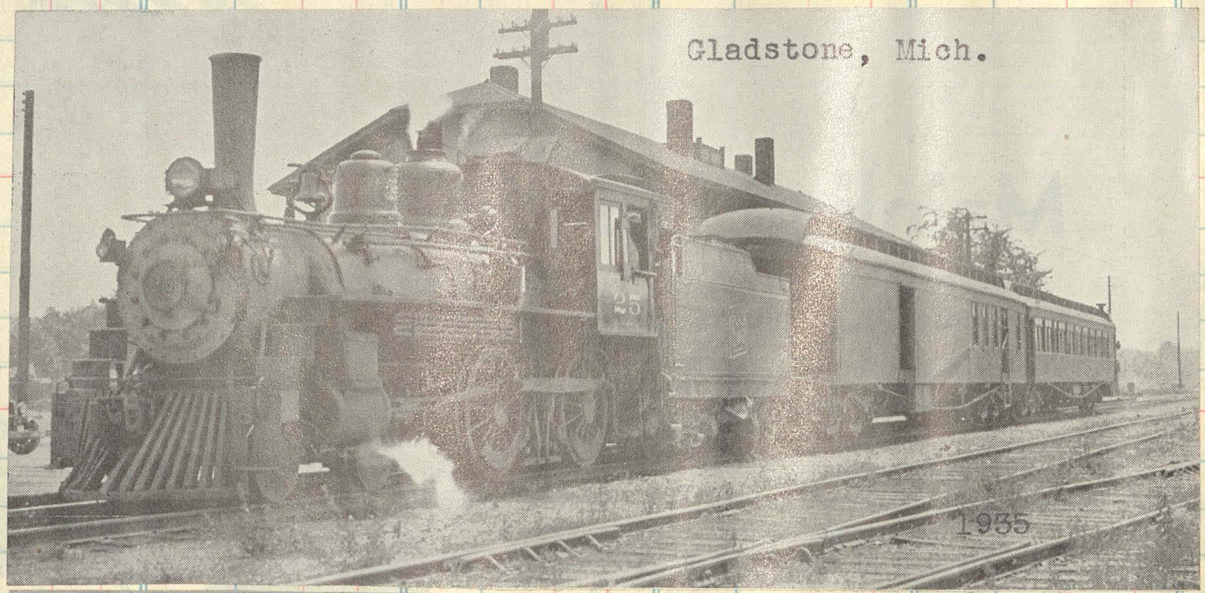


**Trains Nos. 7 and 8 daily.** 1940

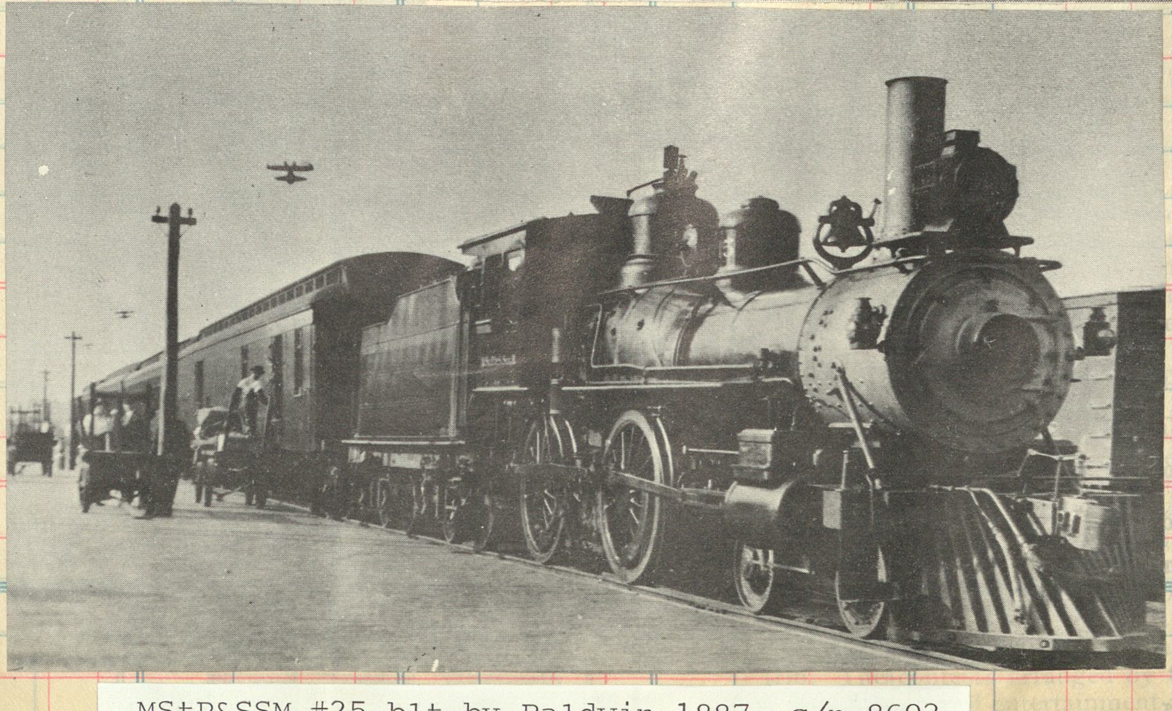
Lounge Sleeper........Twin Cities and S. S Marie (AC)
Cafe Parlor ..............S. S. Marie and Sudbury (AC)
Standard Sleeper.....Sudbury and Montreal (AC)
Diner .................. Twin Cities and Montreal (AC)
Coaches..................Twin Cities and Montreal (AC)
(AC)—Regularly assigned cars Air-Conditioned

Heading into the morning sun, No. 8 hurries along near Rapid River, Michigan enroute to her terminal at Sault Ste. Marie. Engine is W.C. 2713, Pacific type, class H-21 with cyls 25x26, drivers 75", T.E. 36, 833. Built by Schen. 1911.

Gladstone, Mich.



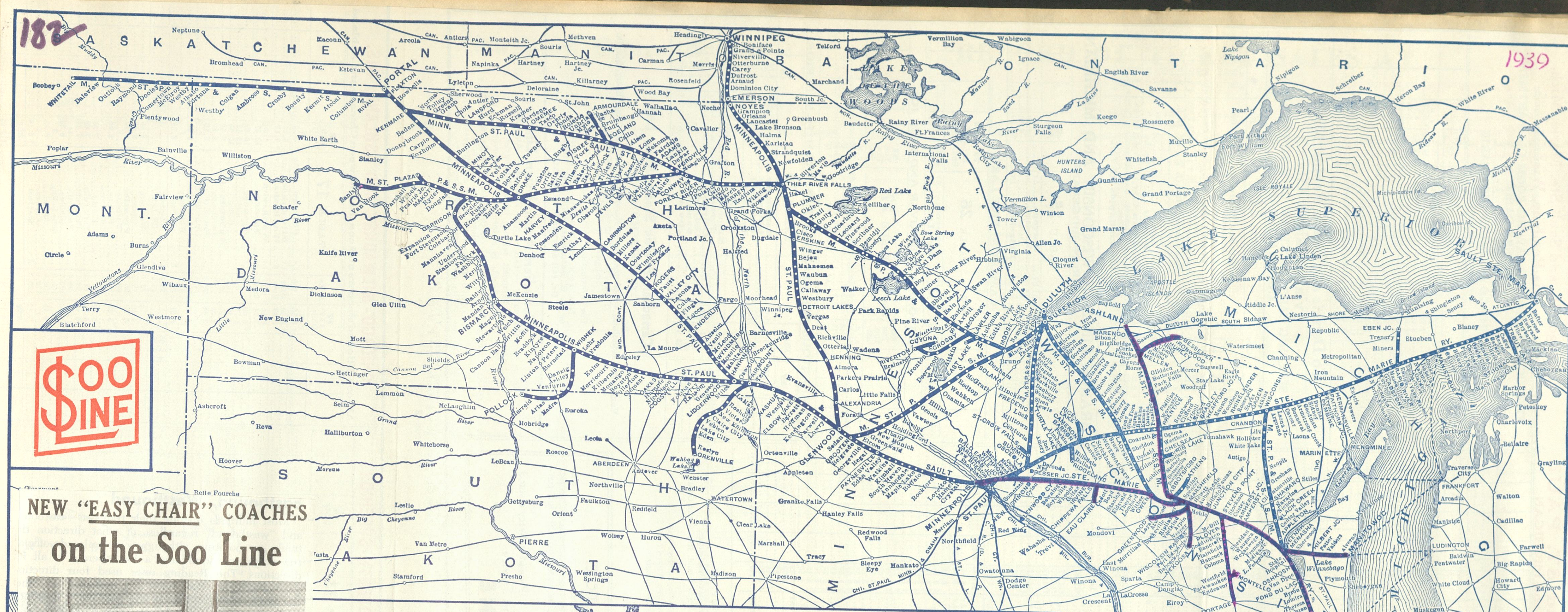
1935



MStP&SSM #25 b1t by Baldwin 1887 c/n 8692
Top in 1935, lower c 1915

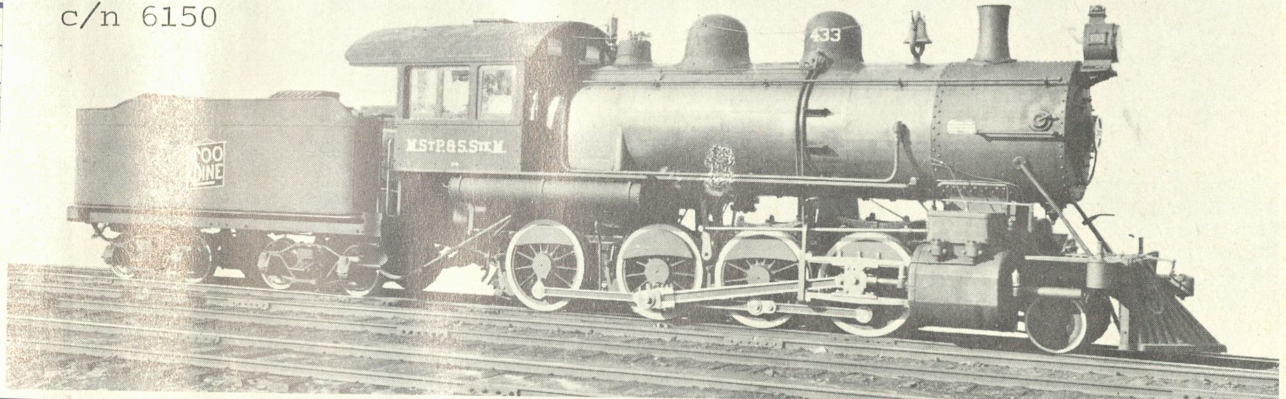
182

1939

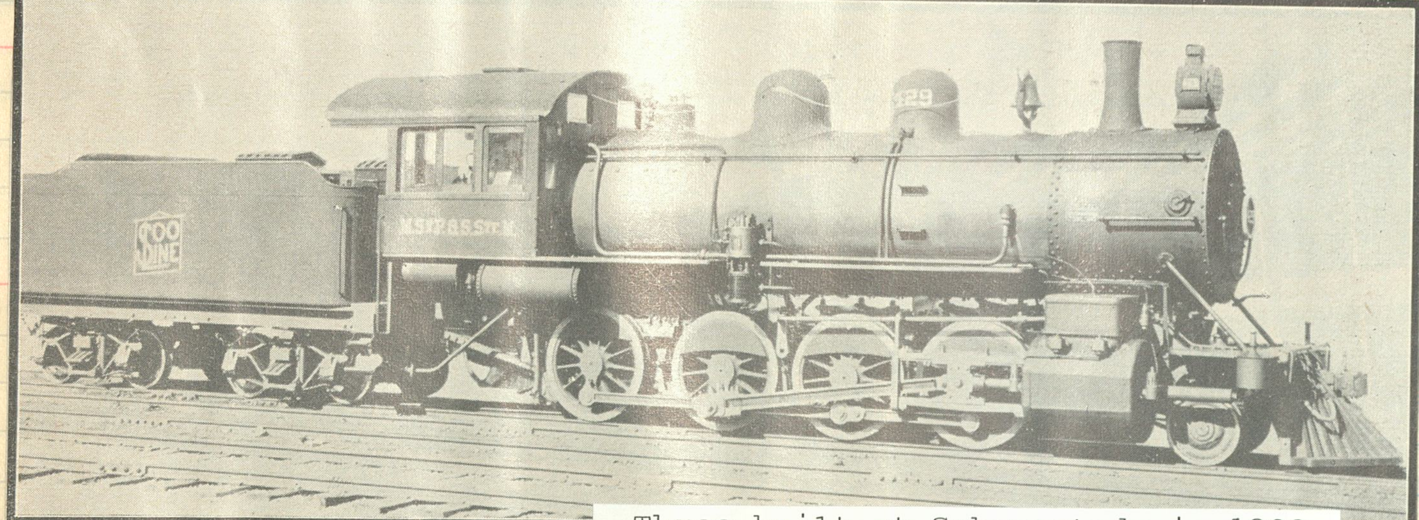

SASKATCHEWAN
MANITOBA
ONTARIO
MONT.
NORTH DAKOTA
SOUTH DAKOTA
MINNESOTA
WISCONSIN
MICHIGAN
IOWA
ILLINOIS
INDIANA
WINNIPEG
PORTAL
MINNEAPOLIS
ST. PAUL
DULUTH
SUPERIOR
ASHLAND
SAULT STE. MARIE
CHICAGO
MILWAUKEE
LAKE SUPERIOR
LAKE MICHIGAN
LAKE OF THE WOODS
SOO LINE
POOLE BROS., INC., CHICAGO
4302 B

## NEW "EASY CHAIR" COACHES on the Soo Line

In 1902 Schenectady delivered four compounds, #431-434, with cyls 22 1/2x35x30 dvs 55"
c/n 6150


433
M.St.P.&S.S.M.
SOO LINE

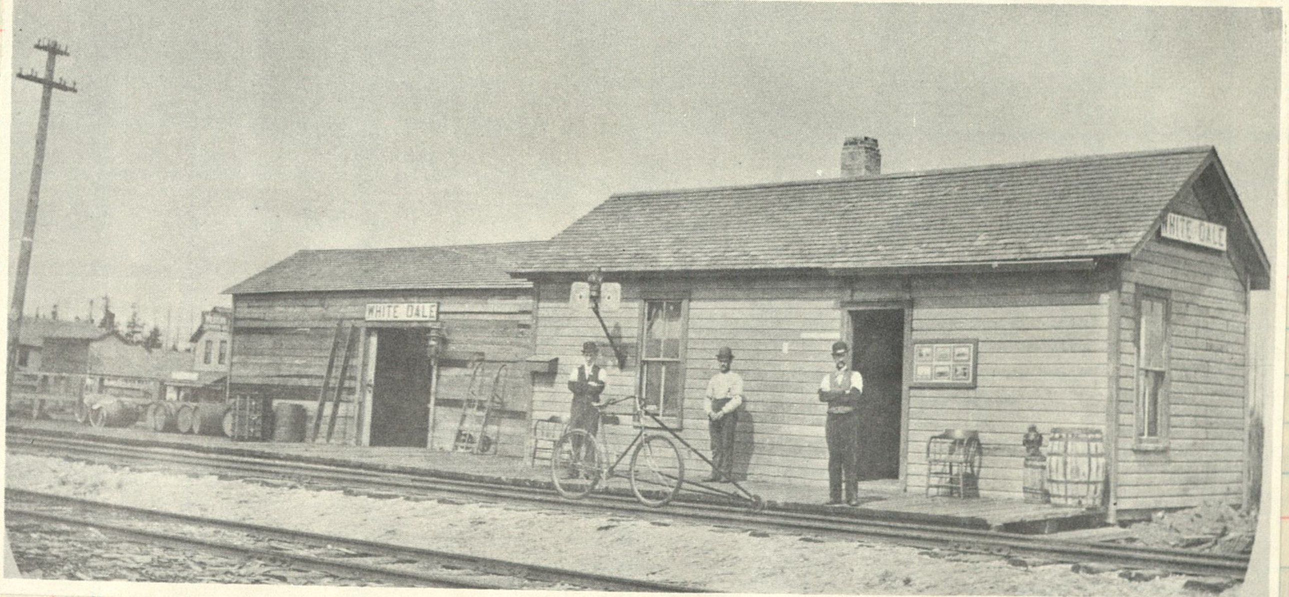
—WC


429
M.St.P.&S.S.M.
SOO LINE

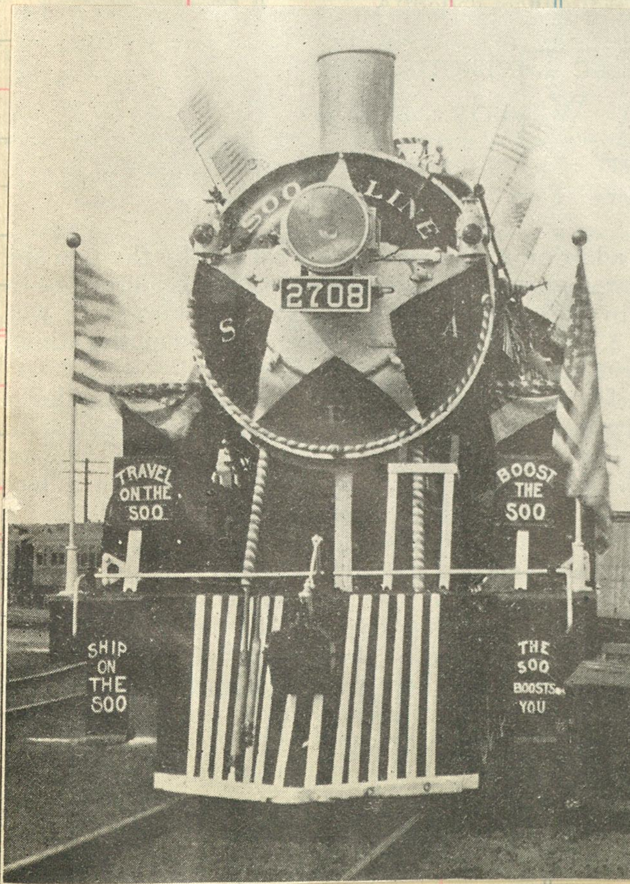
Three built at Schenectady in 1900
noed 428-430 c/n 5631

collection.

Soo Line cross-compound 2-8-0 No. 429 carried her big low-pressure cylinder on her right side like a cumbersome valise. When working compound, this type of locomotive had only half as many exhausts as a simple engine; often it sounded like a simple engine "working on one side."

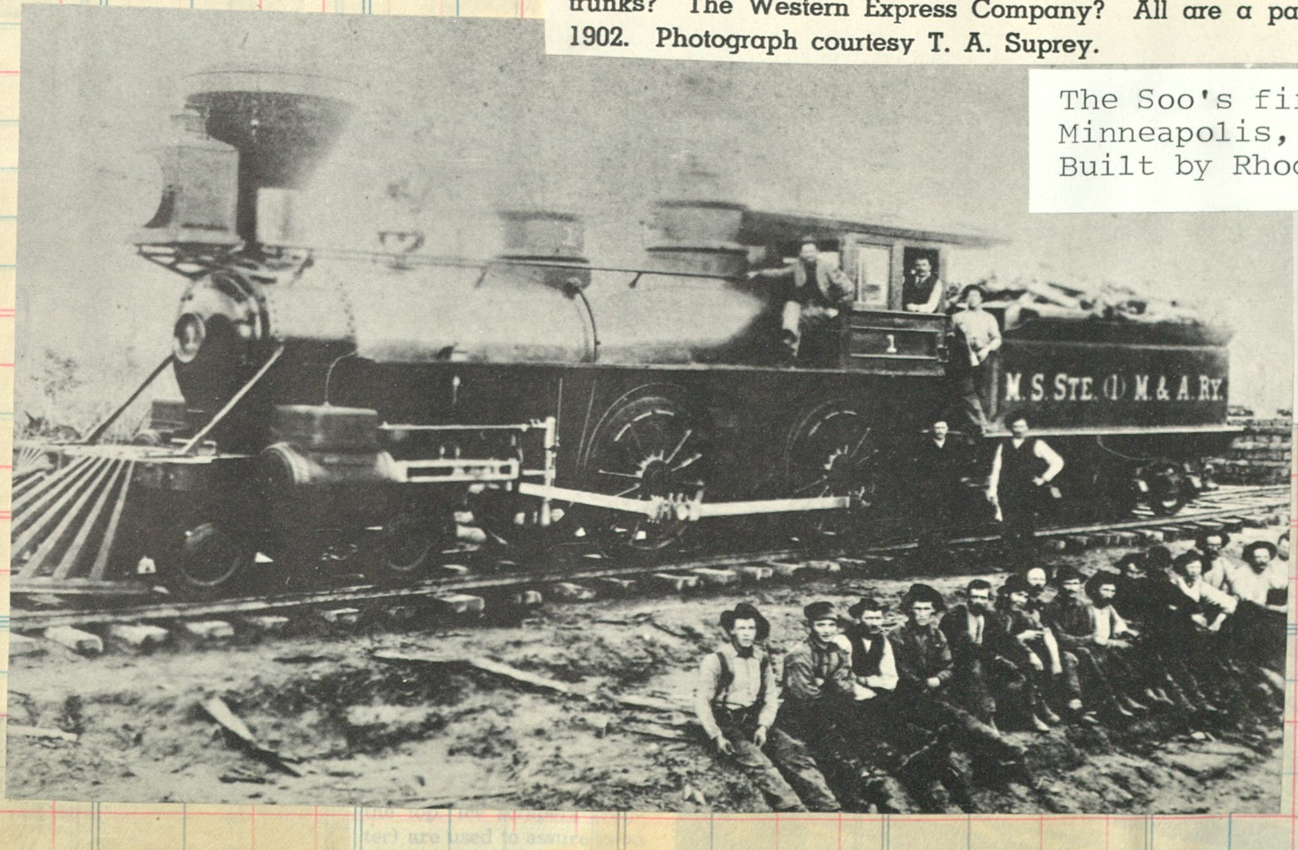


**DO YOU REMEMBER** White Dale, Michigan? The rail bicycles? the sample trunks? The Western Express Company? All are a part of railroading in 1902. Photograph courtesy T. A. Suprey.

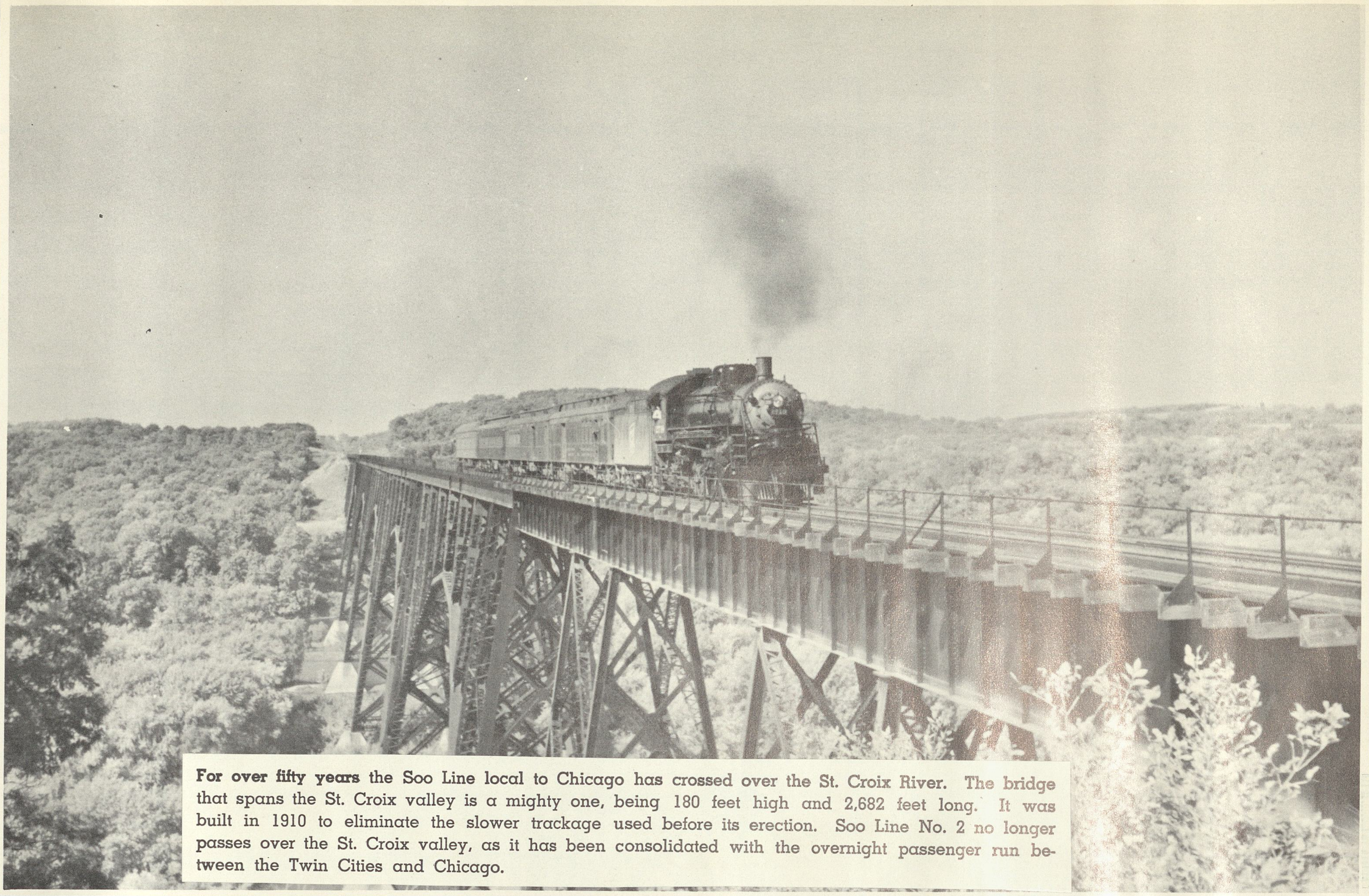

SOO LINE
2708
TRAVEL ON THE SOO
BOOST THE SOO
SHIP ON THE SOO
THE SOO BOOSTS YOU

WC Pacific gussied up for 2nd annual picnic of the shop employees at the Waverly Beach on Lake Winnebago Wis
1925

The Soo's first engine, #1 of the Minneapolis, Sault Ste. Marie & Atlantic
Built by Rhode Island 1884 c/n 1876


M.S.STE. (1) M.&A.RY.
1

T.F. 14,040



**For over fifty years** the Soo Line local to Chicago has crossed over the St. Croix River. The bridge that spans the St. Croix valley is a mighty one, being 180 feet high and 2,682 feet long. It was built in 1910 to eliminate the slower trackage used before its erection. Soo Line No. 2 no longer passes over the St. Croix valley, as it has been consolidated with the overnight passenger run between the Twin Cities and Chicago.

**CHICAGO - MILWAUKEE - ST. PAUL-MINNEAPOLIS**

**Morning Trains**

**Trains Nos. 1 and 2 daily.**

Drawing-room Compartment Sleeper (Air-Conditioned).. Chicago to Stevens Point on Train No. 1

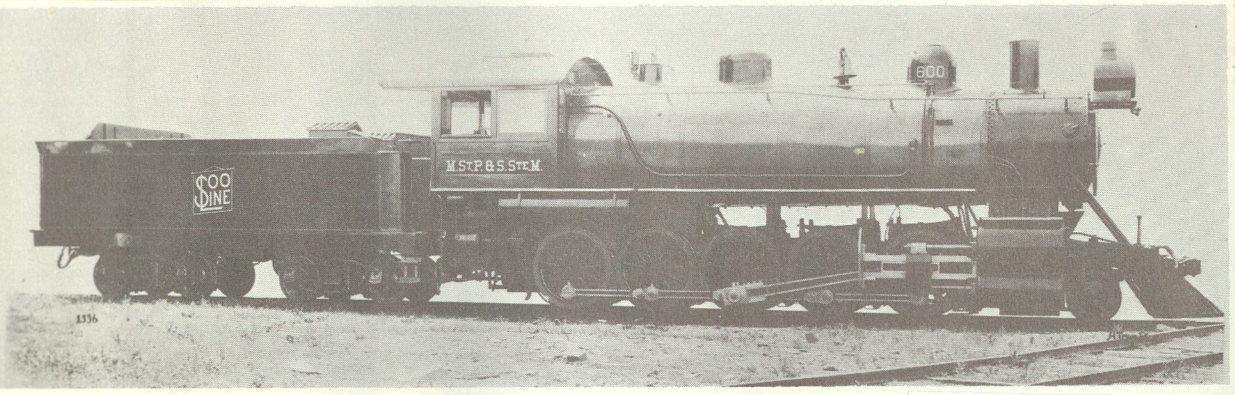
Coaches (Air-Conditioned)...Chicago and Twin Cities

(Sleeping car on Train No. 1 ready for occupancy at 9.30 p. m.)

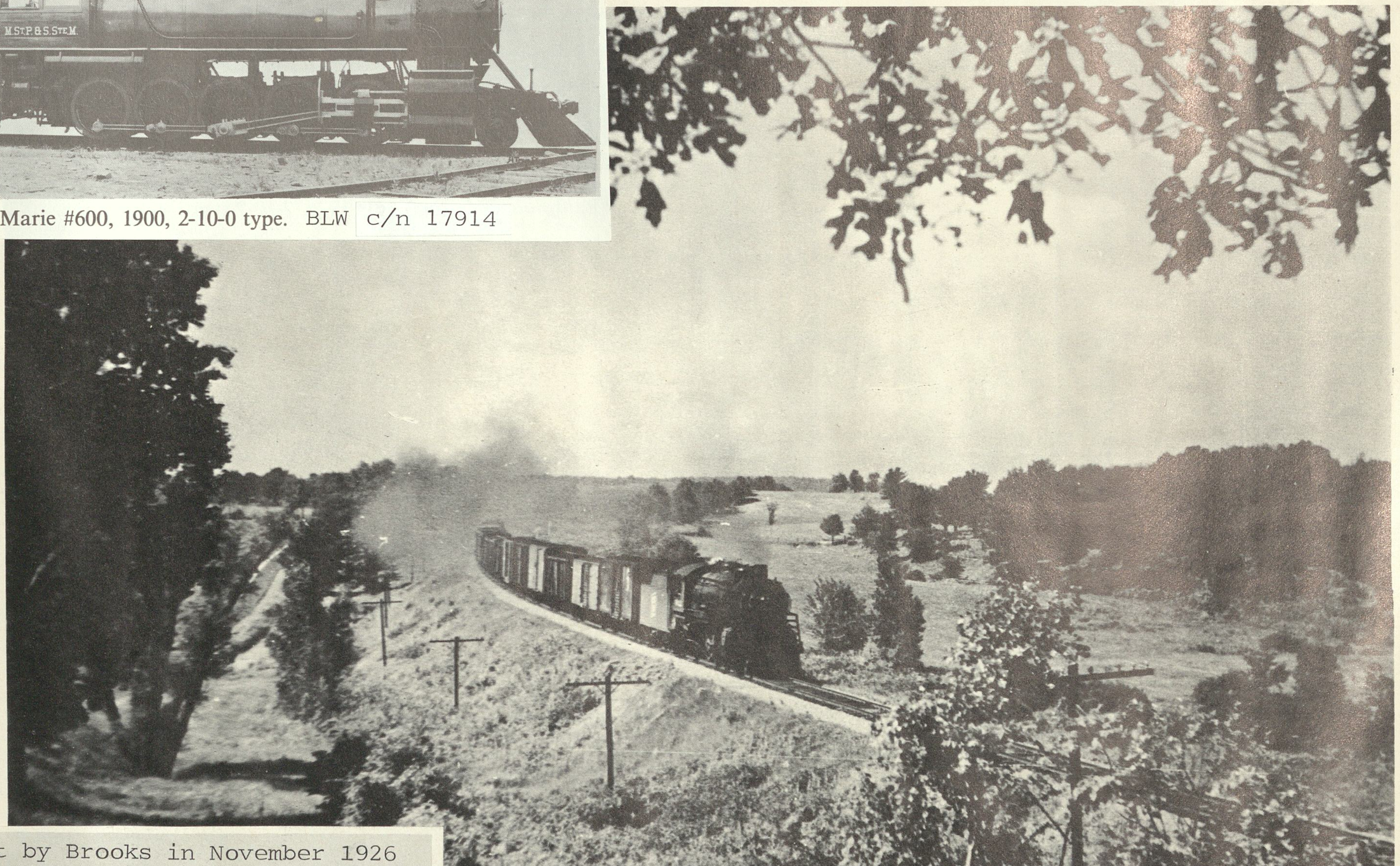
| 1 West Bound | TABLE 4 | 2 East Bound |
|---|---|---|
| A. M. | | P. M. |
| * 1.15 | Lv.....Chicago......Ar | 9.55 |
| 3.40 | ......Burlington...... | 7.10 |
| 4.32 | .......Waukesha....... | 6.20 |
| 6.22 | .....Fond du Lac..... | 4.38 |
| 7.04 | ........Oshkosh....... | 3.57 |
| 7.37 | ........Neenah........ | 3.32 |
| ‖ 9.56 | .....Stevens Point..... | ‖ 1.50 |
| 10.58 | ......Marshfield...... | 12.53 |
| 4.00 | Ar.....St. Paul.....Lv | 8.20 |
| ■ 4.55 | Ar...Minneapolis...Lv | * 7.30 |
| P. M. | ■ Arrive G. N. station in Minneapolis | A. M. |

★ Between Somerset and North St. Paul the Railway crosses a mighty bridge spanning the St. Croix River, which is the dividing line between the states of Minnesota and Wisconsin. It was built at a cost of $600,000; length 2,700 feet; height above water 185 feet. It is of the steel-arch type and required 5,000 tons of structural steel.

Blt 1910

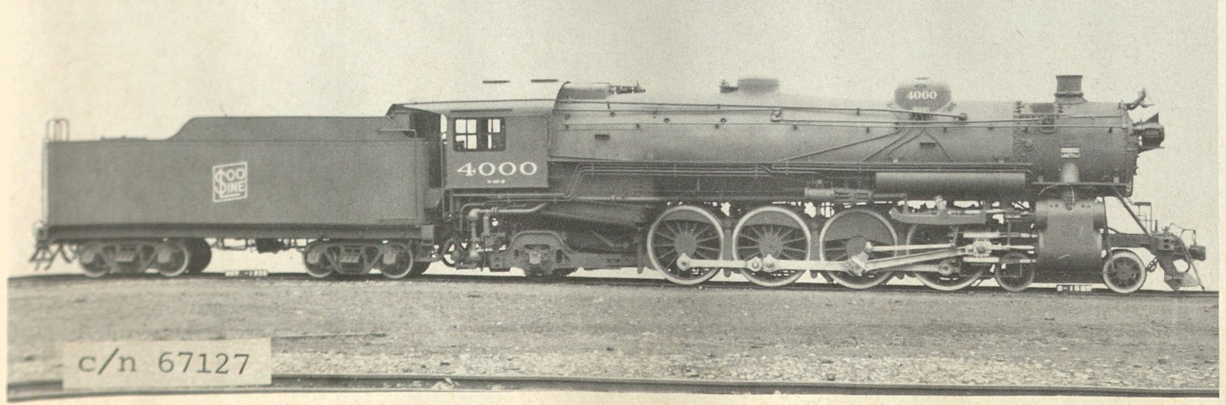


Minneapolis, St. Paul & Sault Ste. Marie #600, 1900, 2-10-0 type. BLW c/n 17914

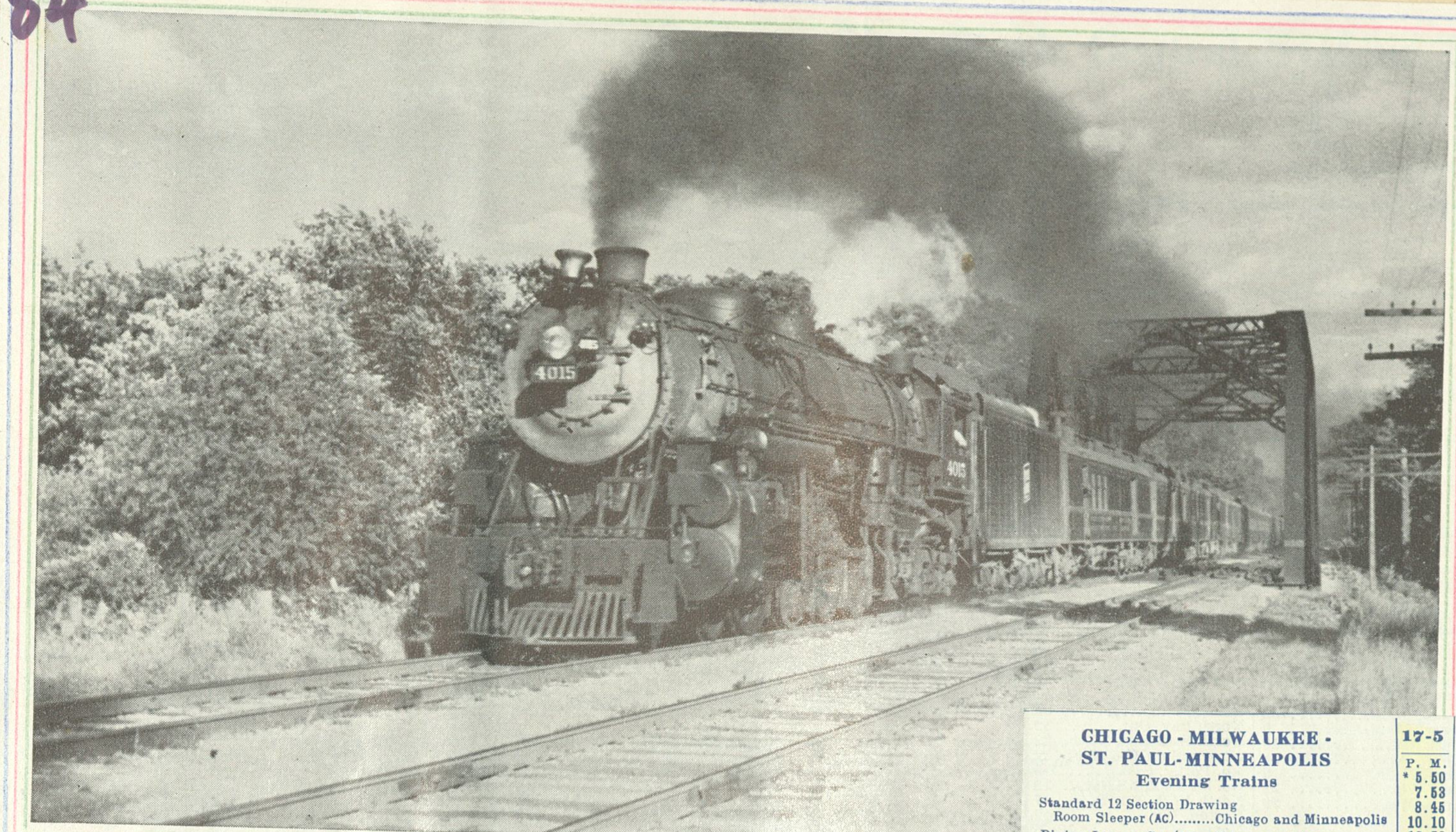


**NO. 51, THE LOCAL FREIGHT** between Dresser and Superior, Wisconsin, rolls through Wisconsin with a "Mike" on the smoky end.

Wisconsin Central 4000-4009 built by Brooks in November 1926



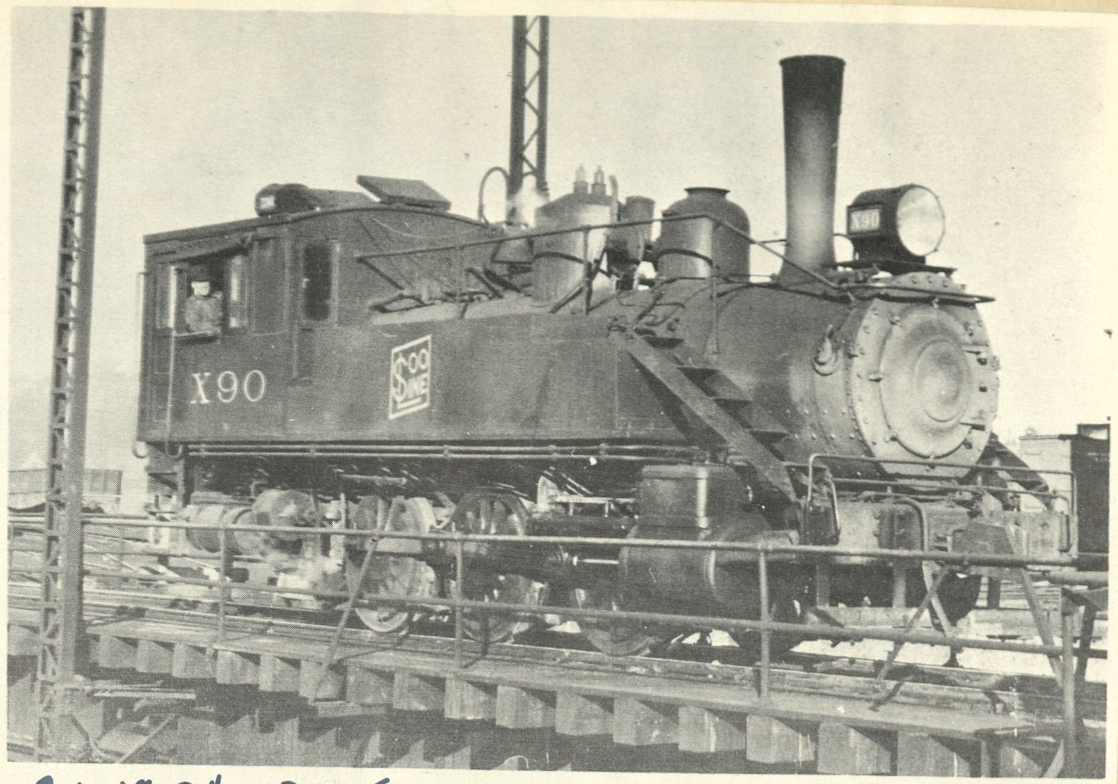
c/n 67127



| | 17-5 | TABLE 3 1940 | 6-18 |
|---|---|---|---|
| **CHICAGO - MILWAUKEE - ST. PAUL-MINNEAPOLIS** | P. M. | | A. M. |
| **Evening Trains** | * 5.50 | Lv.....Chicago......Ar | 7.30 |
| Standard 12 Section Drawing Room Sleeper (AC).........Chicago and Minneapolis | 7.53 | ......Burlington...... | 5.24 |
| | 8.45 | .......Waukesha....... | 4.48 |
| Dining-Lounge Car (AC)...Chicago and Owen | 10.10 | ......Fond du Lac...... | 3.08 |
| Coaches (AC)............Chicago and Twin Cities | 10.58 | ........Oshkosh....... | 2.23 |
| | 11.27 | ........Neenah........ | 1.59 |
| (AC)—Regularly assigned cars Air-Conditioned | 2.12 | ...... Marshfield...... | 11.18 |
| | 7.20 | Ar.....St. Paul.....Lv | 6.00 |
| **For Complete Table see page 10** | 8.05 | Ar.. Minneapolis...Lv | * 5.20 |
| | A. M. | | P. M. |

No. 17, outbound from Chicago on its overnight run to the Twin Cities behind 4-8-2 [W.C.] #4015.

Amount Clos. No. Sold



Cyls 18x24 Dvs 50" T.E. 21,150 Class B

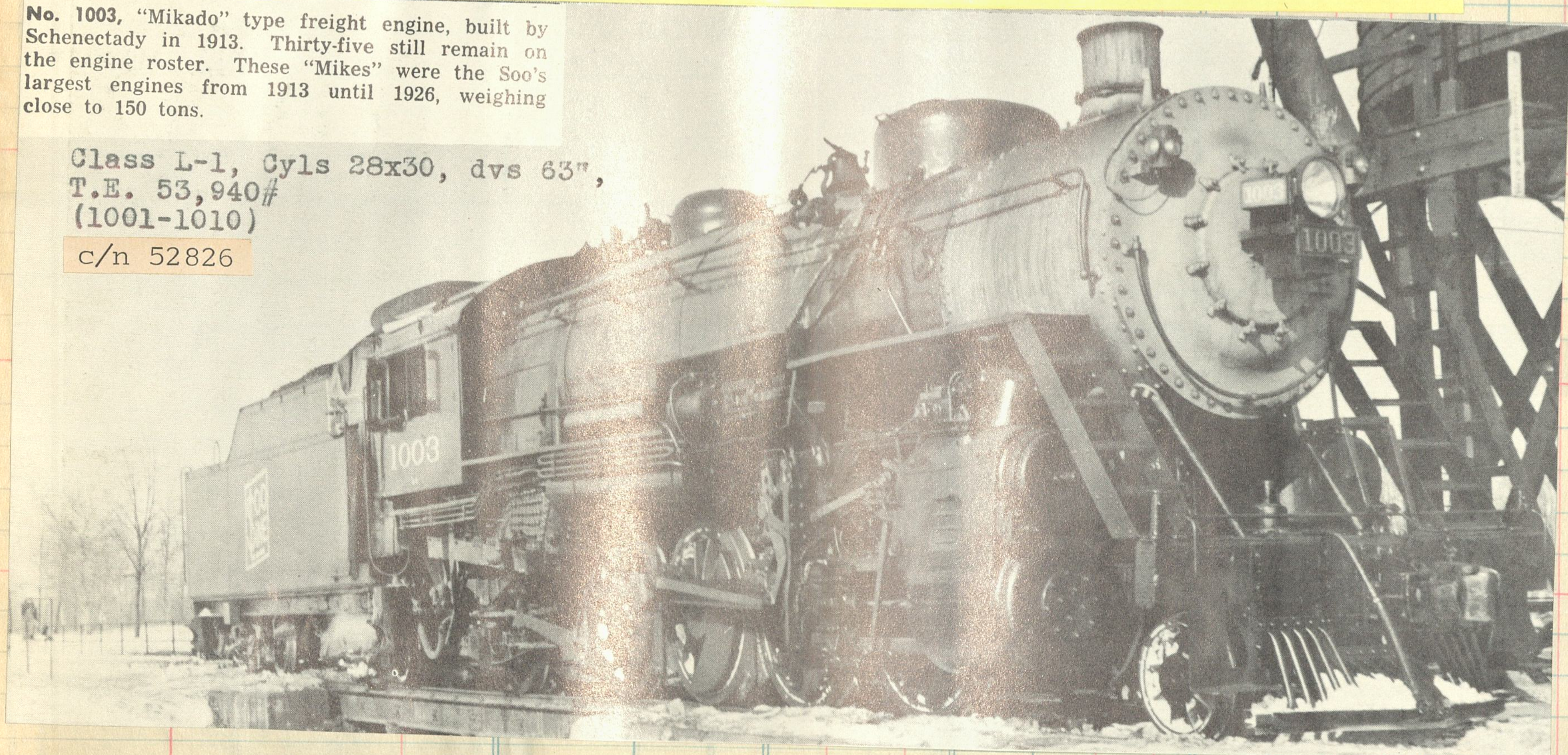
**THIS SADDLE TANKER X90,** built by Rhode Island in 1887, still keeps busy at the roundhouse at Shoreham, Minnesota.

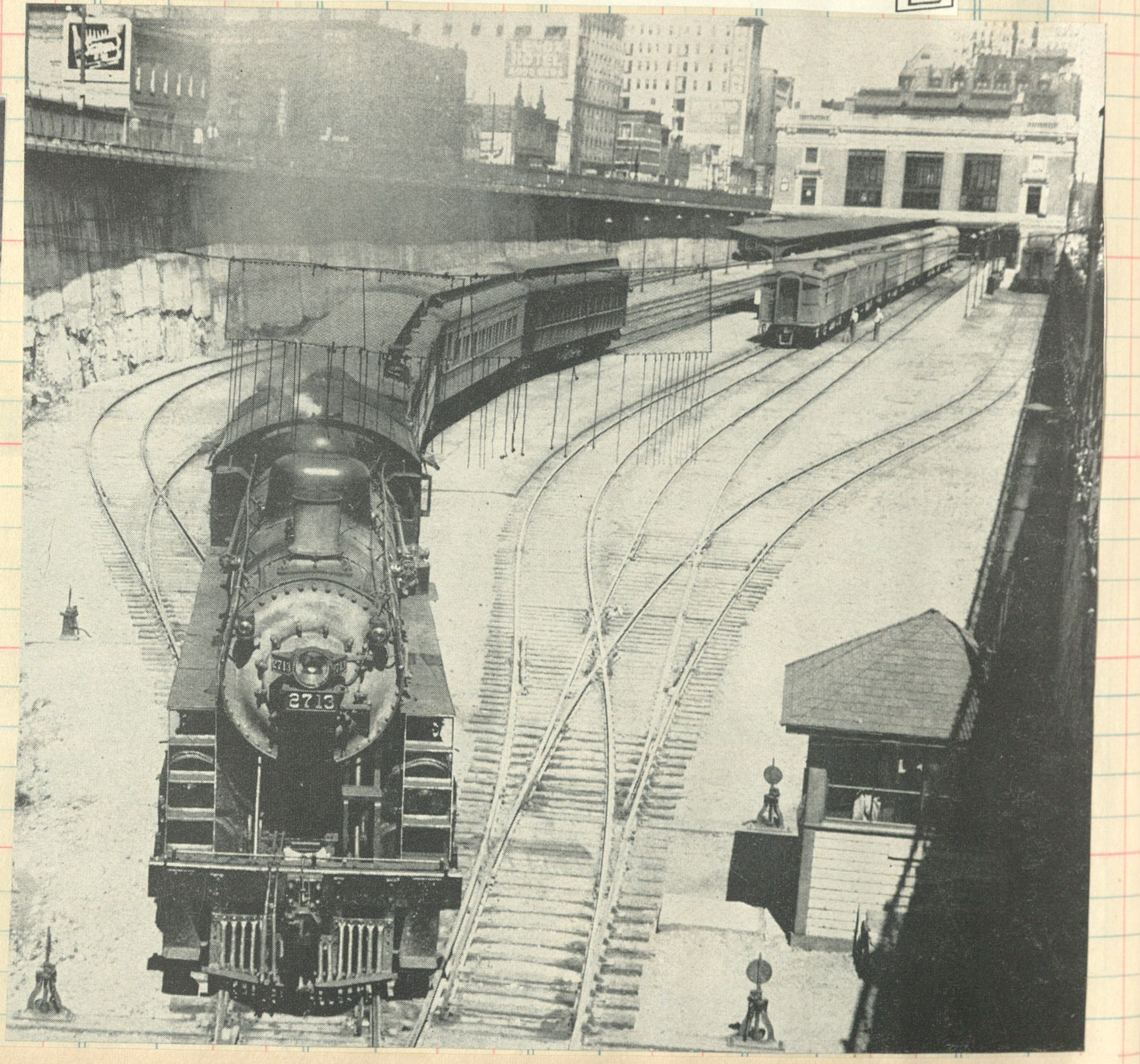
Clos. No. Sold

**No. 1003,** "Mikado" type freight engine, built by Schenectady in 1913. Thirty-five still remain on the engine roster. These "Mikes" were the Soo's largest engines from 1913 until 1926, weighing close to 150 tons.

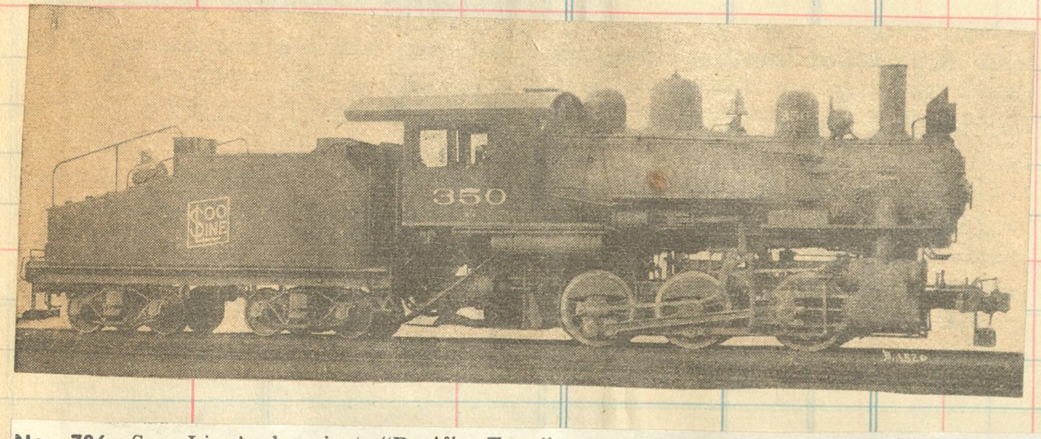
Class L-1, Cyls 28x30, dvs 63",
T.E. 53,940#
(1001-1010)

c/n 52826





Between Duluth-Superior and the Twin Cities the Soo, G.N. and N.P. pooled their passenger service. This is Soo #63 out of Duluth at 1:00 pm behind W.C. #2713, an H-21 Pacific built by Schenectady in 1911. c/n 49796

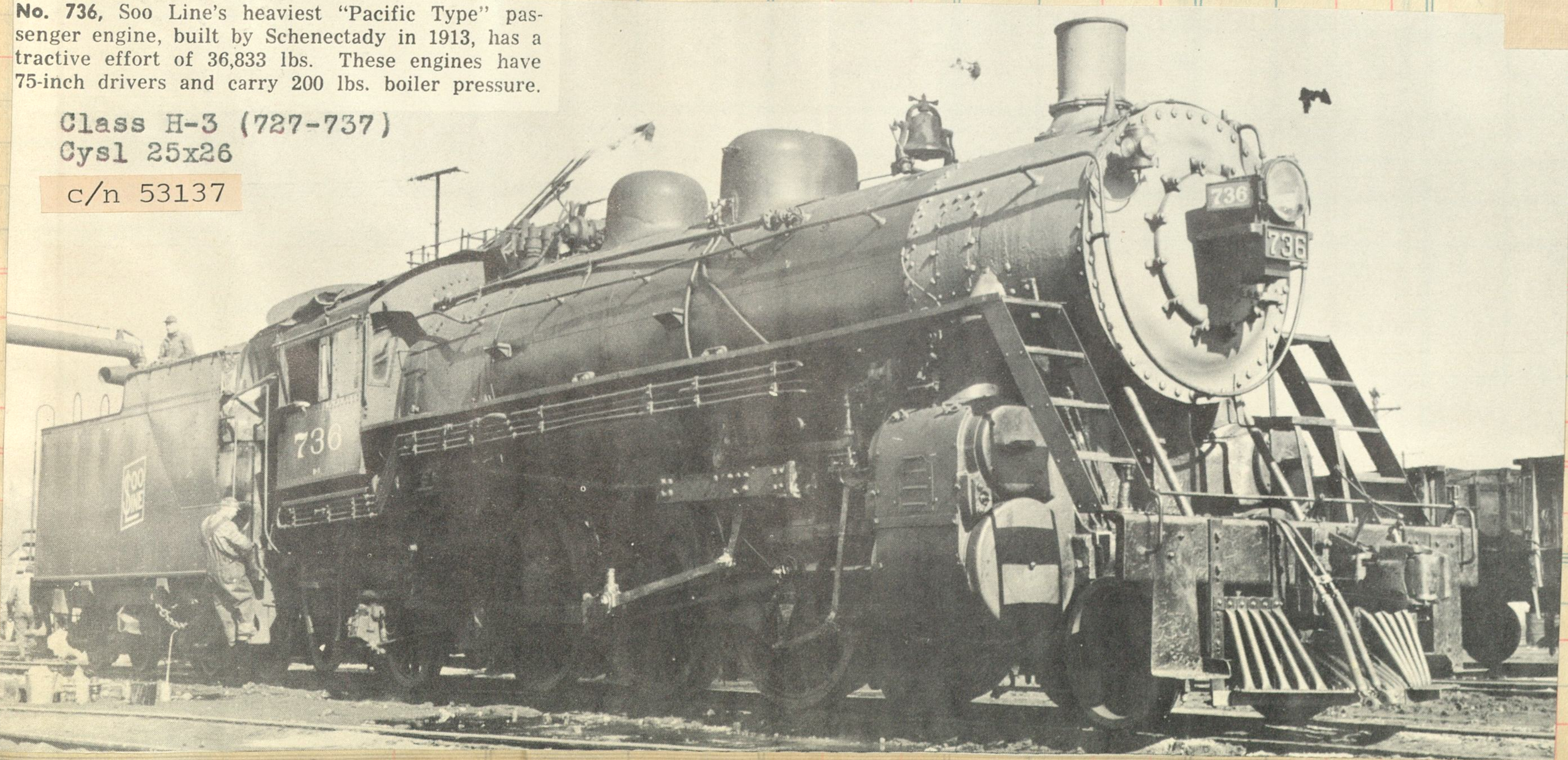


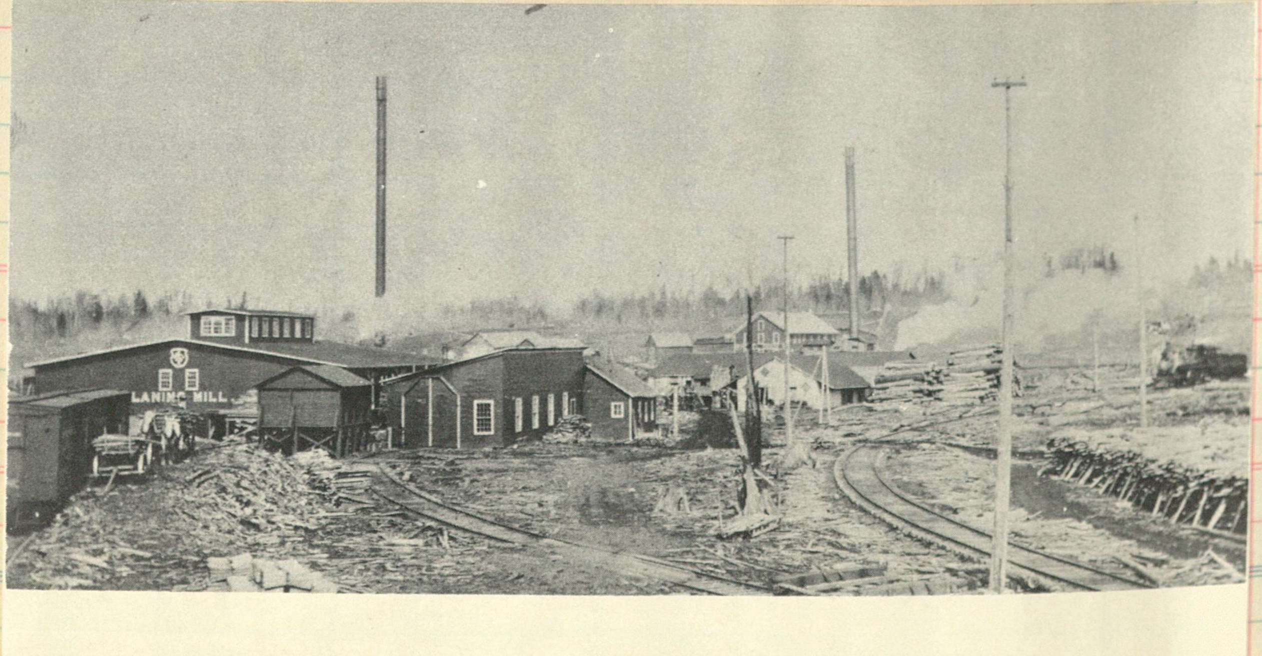
One of five yard engines, 350-354, delivered by the Brooks plant 1920 c/n 61757

**No. 736,** Soo Line's heaviest "Pacific Type" passenger engine, built by Schenectady in 1913, has a tractive effort of 36,833 lbs. These engines have 75-inch drivers and carry 200 lbs. boiler pressure.

Class H-3 (727-737)
Cysl 25x26

c/n 53137

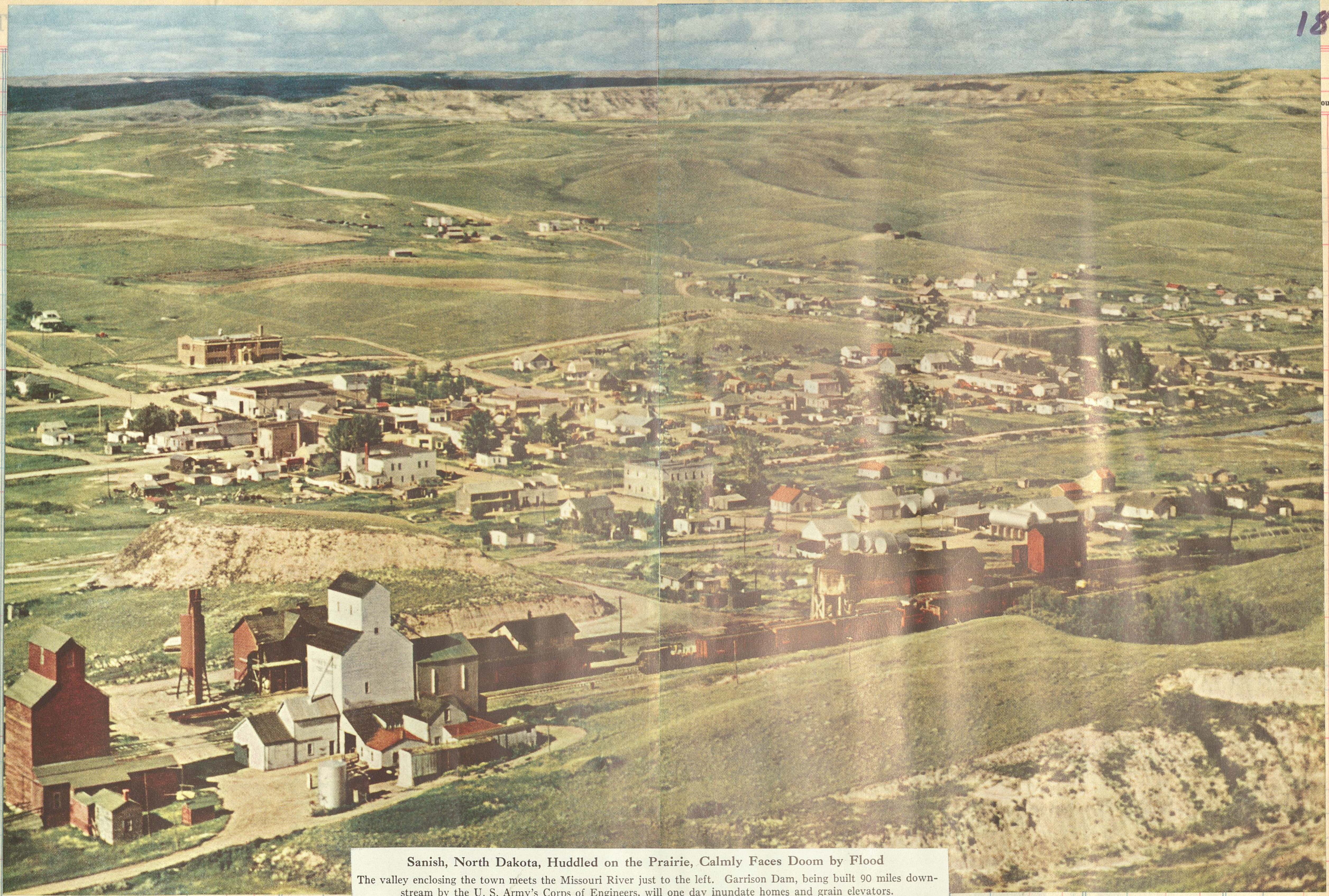




**INGRAM LUMBER COMPANY,** Ingram, Wisconsin. Typical of the many lumber companies which located on the Soo Line some fifty years ago. Photograph courtesy T. A. Suprey.

185

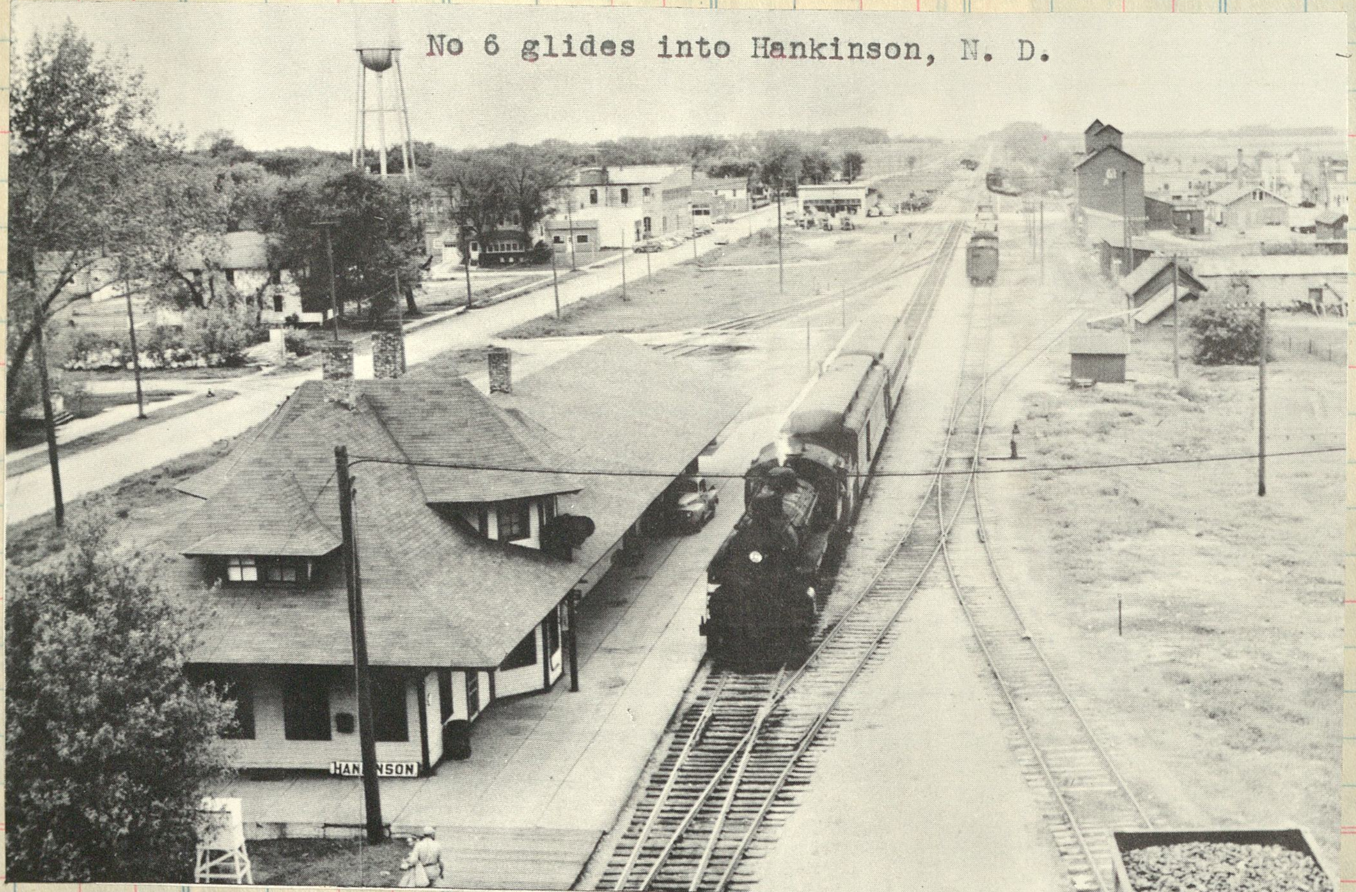
Clas. No. Sold Amount Clas. No. Sold Amount

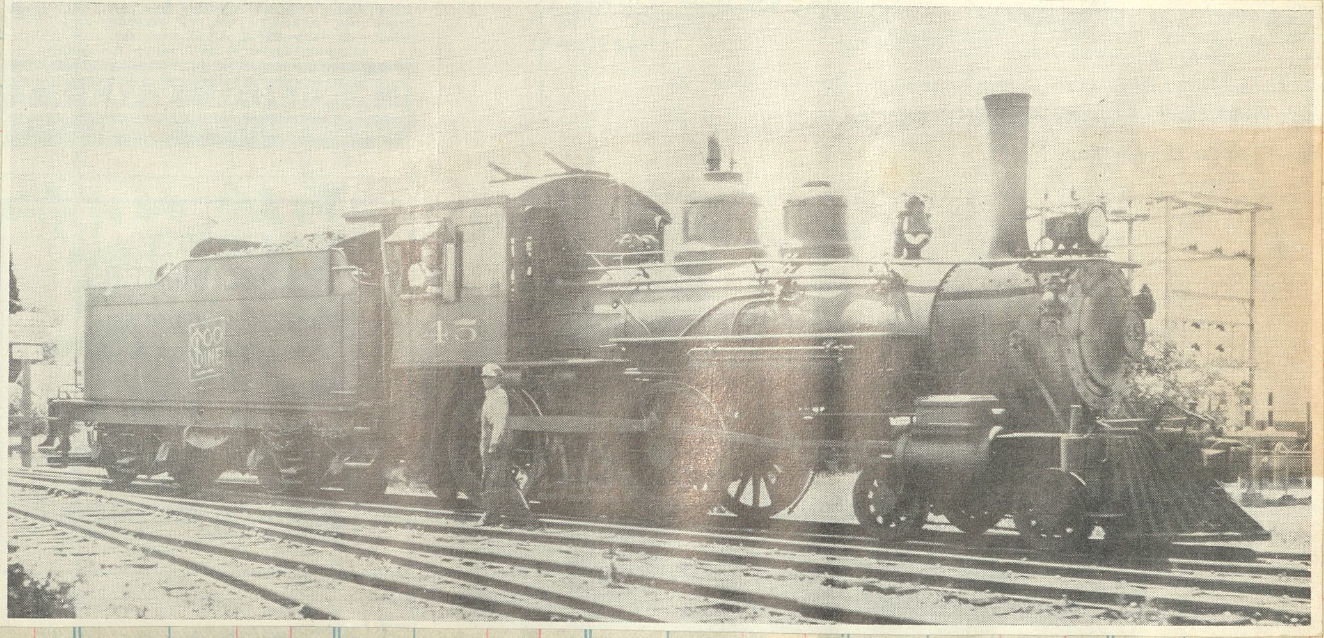


**Sanish, North Dakota, Huddled on the Prairie, Calmly Faces Doom by Flood**

The valley enclosing the town meets the Missouri River just to the left. Garrison Dam, being built 90 miles downstream by the U. S. Army's Corps of Engineers, will one day inundate homes and grain elevators.

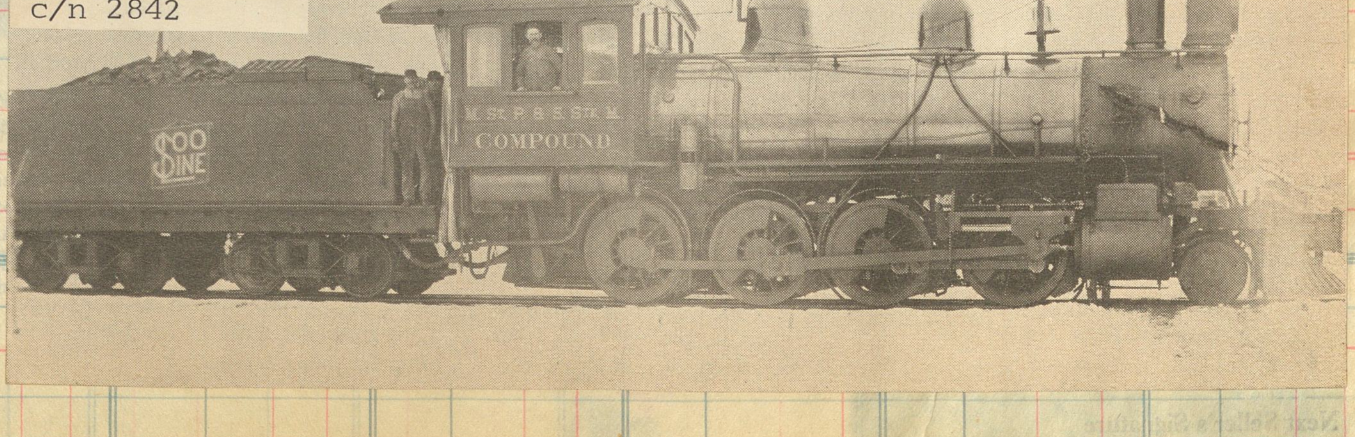
No 6 glides into Hankinson, N. D.



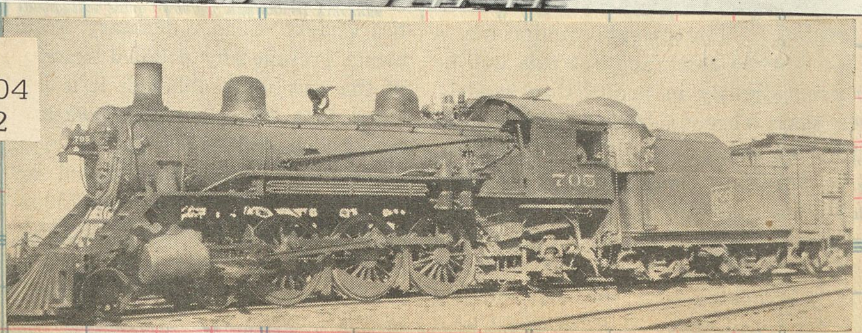


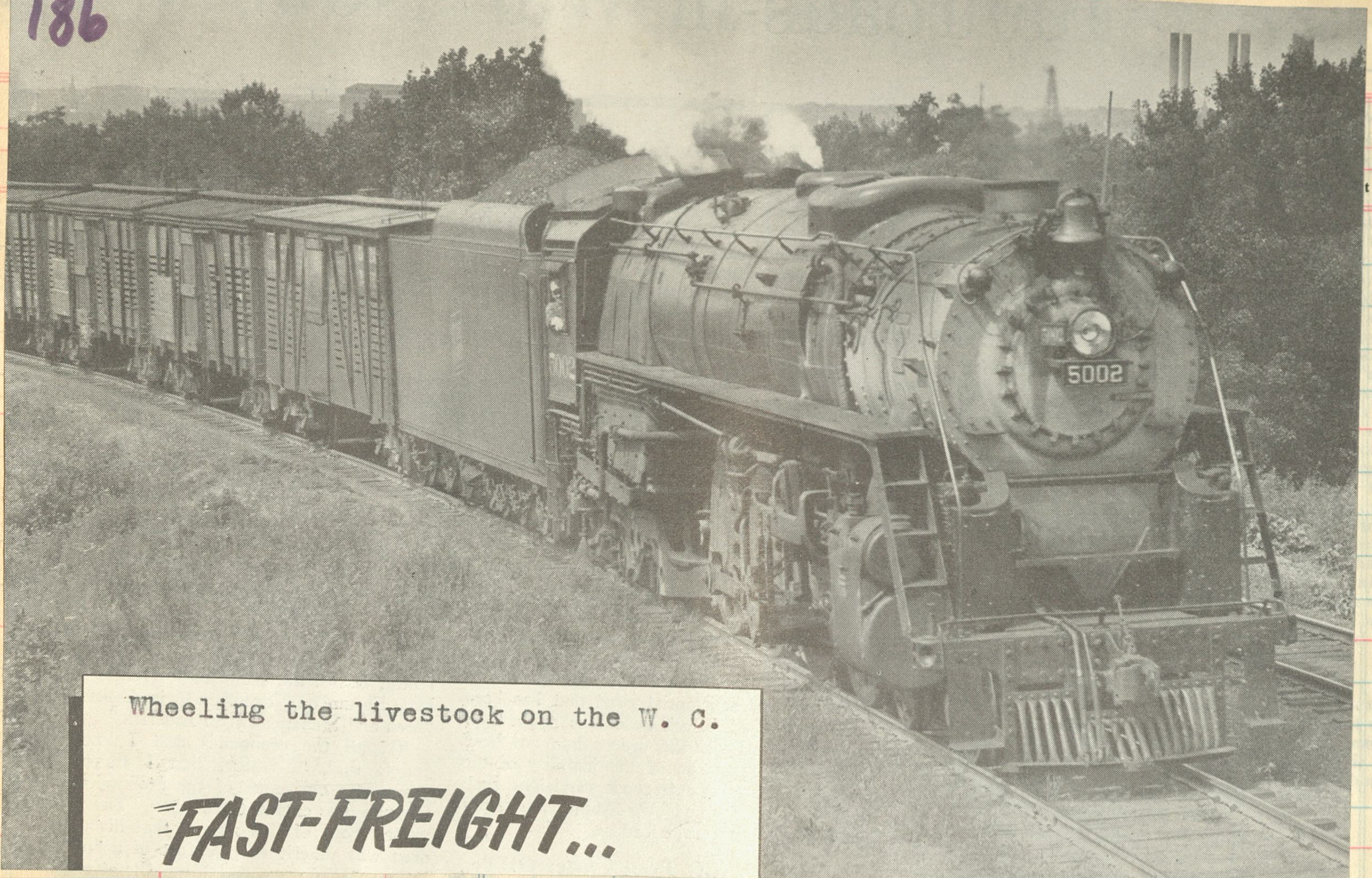
Old reliable #45 saw over a half a century of service for the Soo. Built in 1886 by Baldwin c/n 8234

#400
Rhode Is 1892
c/n 2842


M. St. P. & S. Ste. M.
COMPOUND
SOO LINE

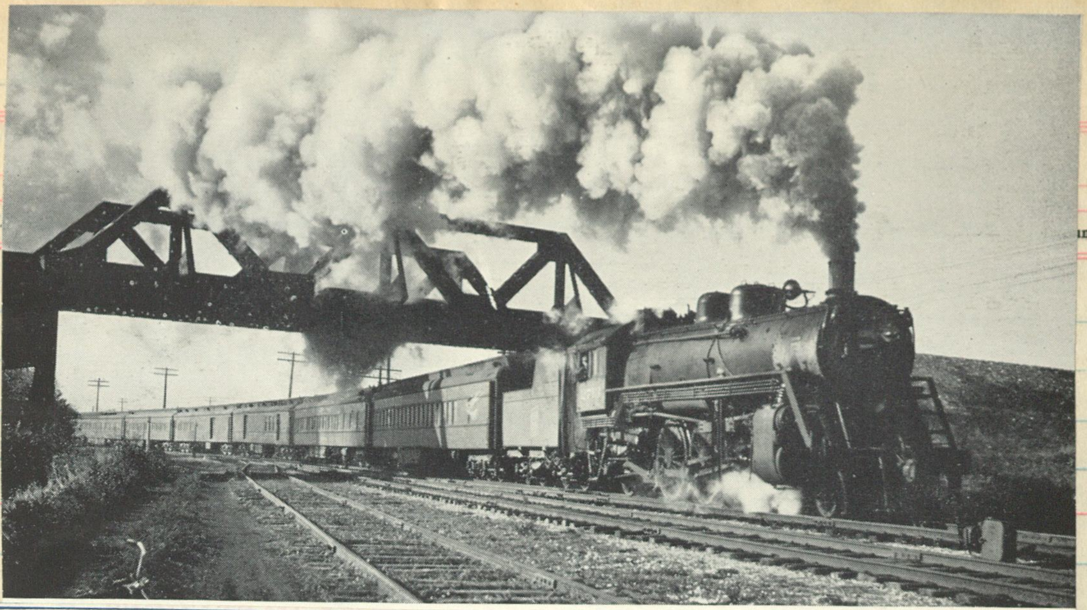
701-708
Schen 1904
c/n 29912





Wheeling the livestock on the W. C.

FAST-FREIGHT...



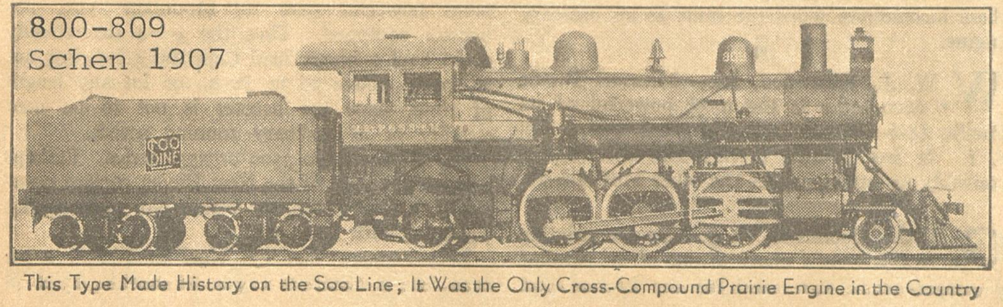
The Canadian Pacific reaches its arm down into the United States via its subsidiary, the Minneapolis, St. Paul & Sault Ste. Marie Railway, whose bright red coaches are much like CP's own. Here the Soo Line's crack overnight *Winnipegger* from the Twin Cities arrives in Winnipeg on the advertised, 9 a. m.

**the WINNIPEGER**

**Pullman Sleepers, Dining Buffet Lounge Car and Coaches**
**AIR-CONDITIONED**
**ST. PAUL - MINNEAPOLIS-WINNIPEG EXPRESS**
**Trains Nos. 109 and 110, daily.**
Buffet
Lounge Sleeper ....Twin Cities and Winnipeg
Standard Drawing-room
Compt. Sleepers...Twin Cities and Winnipeg
Coaches ..................Twin Cities and Winnipeg
Diner ......................Twin Cities and Winnipeg
**For Complete Table see page 8**

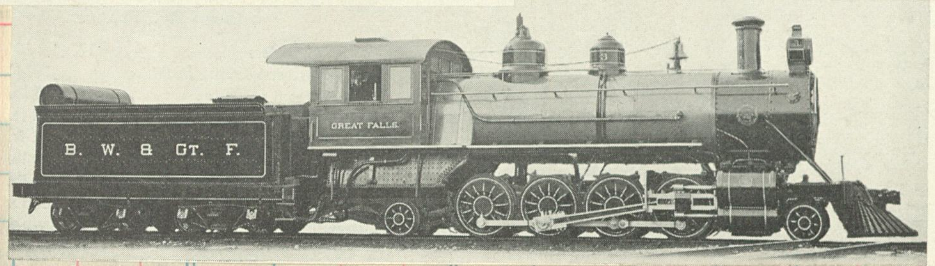
| 109 North Bound | TABLE 2 1940 | 110 South Bound |
|---|---|---|
| P. M | | A. M. |
| * 7.45 | Lv.....St. Paul.....Ar | * 7.55 |
| 8.20 | Lv...Minneapolis...Ar | 7.20 |
| 11.22 | .......Glenwood....... | 4.30 |
| 11.48 | ......Alexandria...... | 3.50 |
| 1.30 | .....Detroit Lakes..... | 1.54 |
| 4.13 | ...Thief River Falls... | 11.15 |
| 8.45 | Ar....Winnipeg....Lv | * 6.35 |
| A. M. | | P. M. |

800-809
Schen 1907



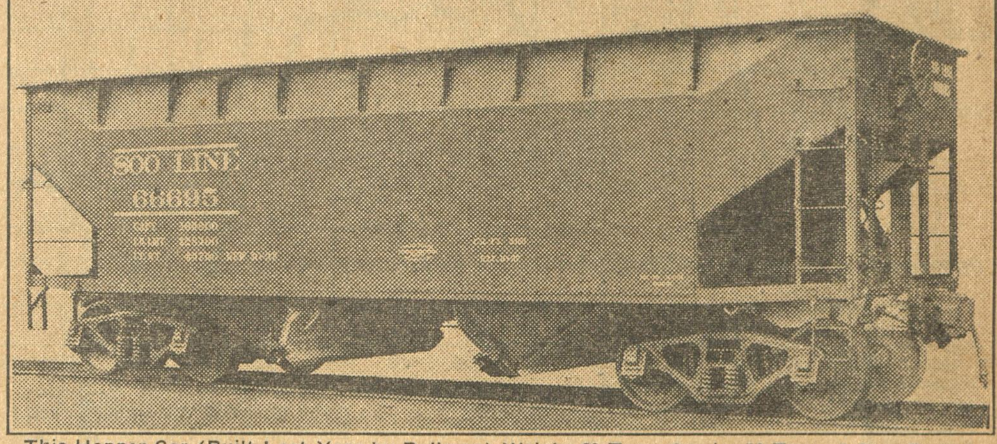
This Type Made History on the Soo Line; It Was the Only Cross-Compound Prairie Engine in the Country

BW&GF #3, to Soo #951, 601,
1000. c/n 19558



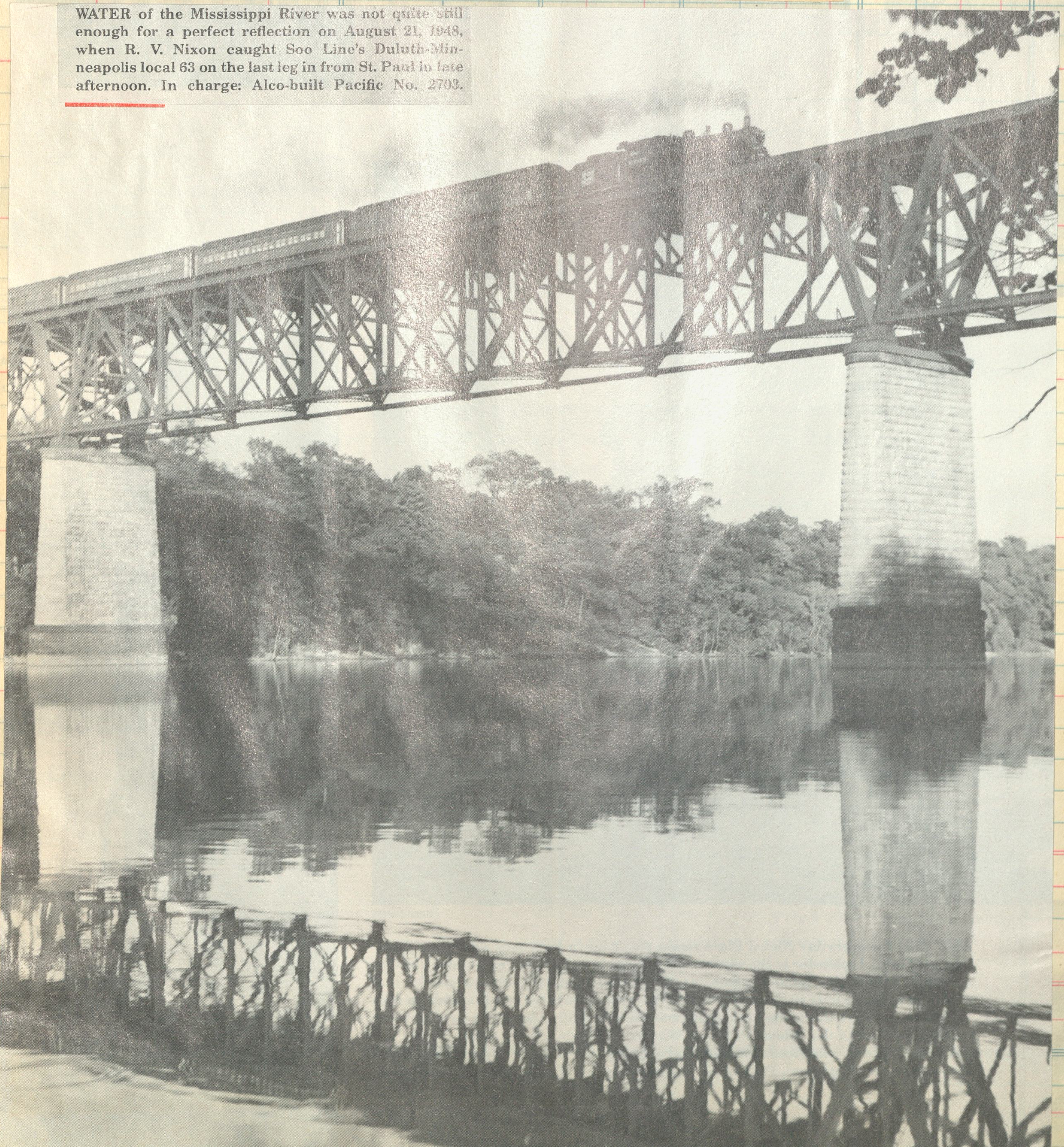
**Compound Mikado Type Locomotive, Built for the Bismarck, Washburn & Great Falls Ry., 1901**

| | |
|---|---|
| Cylinders | 14″ & 24″ x 26″ |
| Drivers, diam. | 50″ |
| Steam pressure | 200 lb. |
| Grate area | 56 sq. ft. |
| Heating surface | 2496 sq. ft. |
| Weight on drivers | 128,000 lb. |
| " total engine | 166,900 lb. |
| Tractive force (compound) | 27,400 lb. |

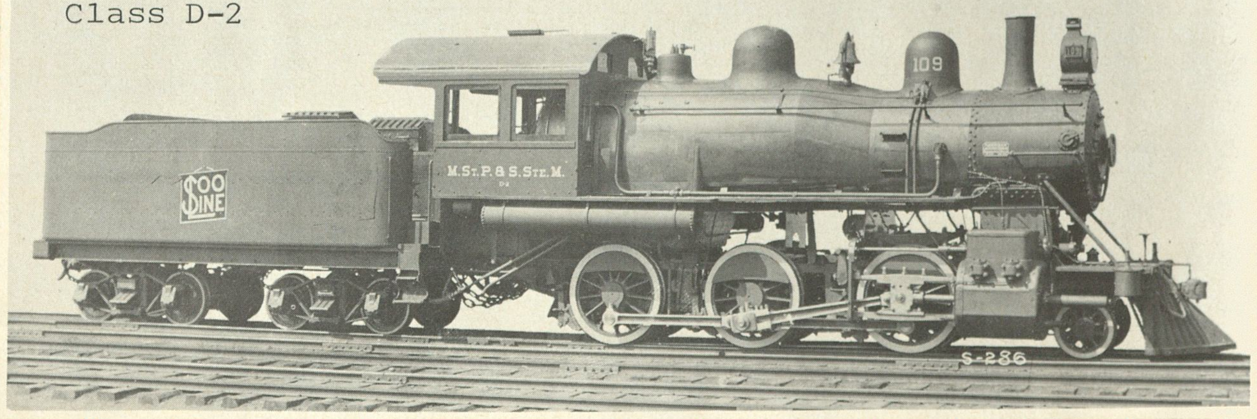


This Hopper Car (Built Last Year by Pullman) Weighs 20 Tons, Carries 50 Tons of Ore, Earns a Lot of Money for the Soo When It Is Running Full

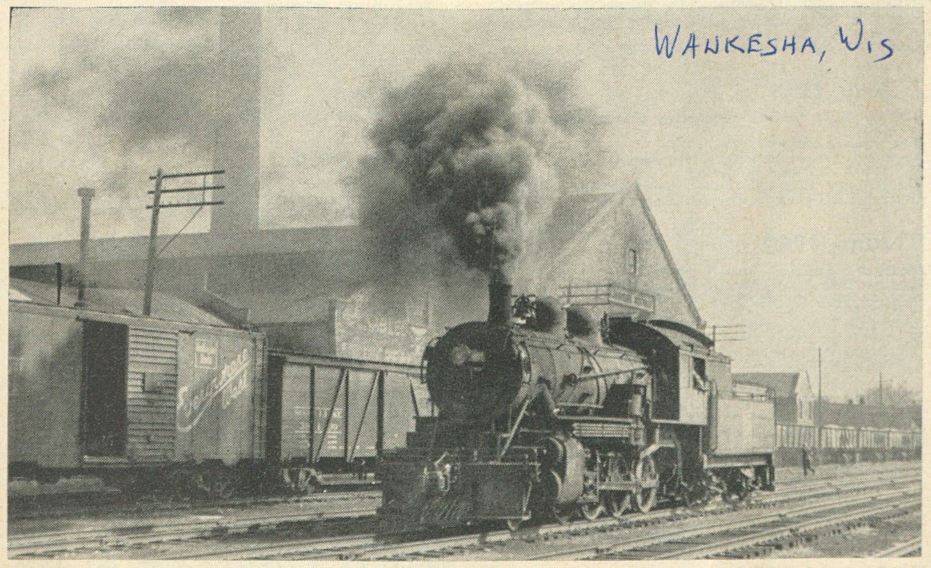
**WATER** of the Mississippi River was not quite still enough for a perfect reflection on August 21, 1948, when R. V. Nixon caught Soo Line's Duluth-Minneapolis local 63 on the last leg in from St. Paul in late afternoon. In charge: Alco-built Pacific No. 2703.



108-110 (compound) c/n 27371 Schen 1903
Class D-2



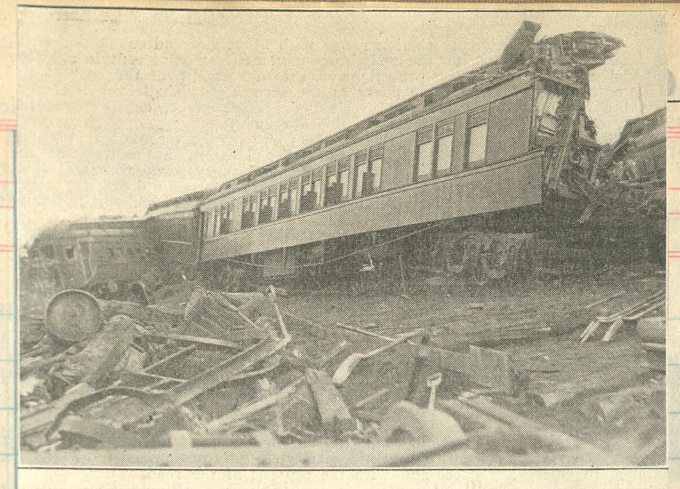
WAUKESHA, Wis



Russell D. Porter

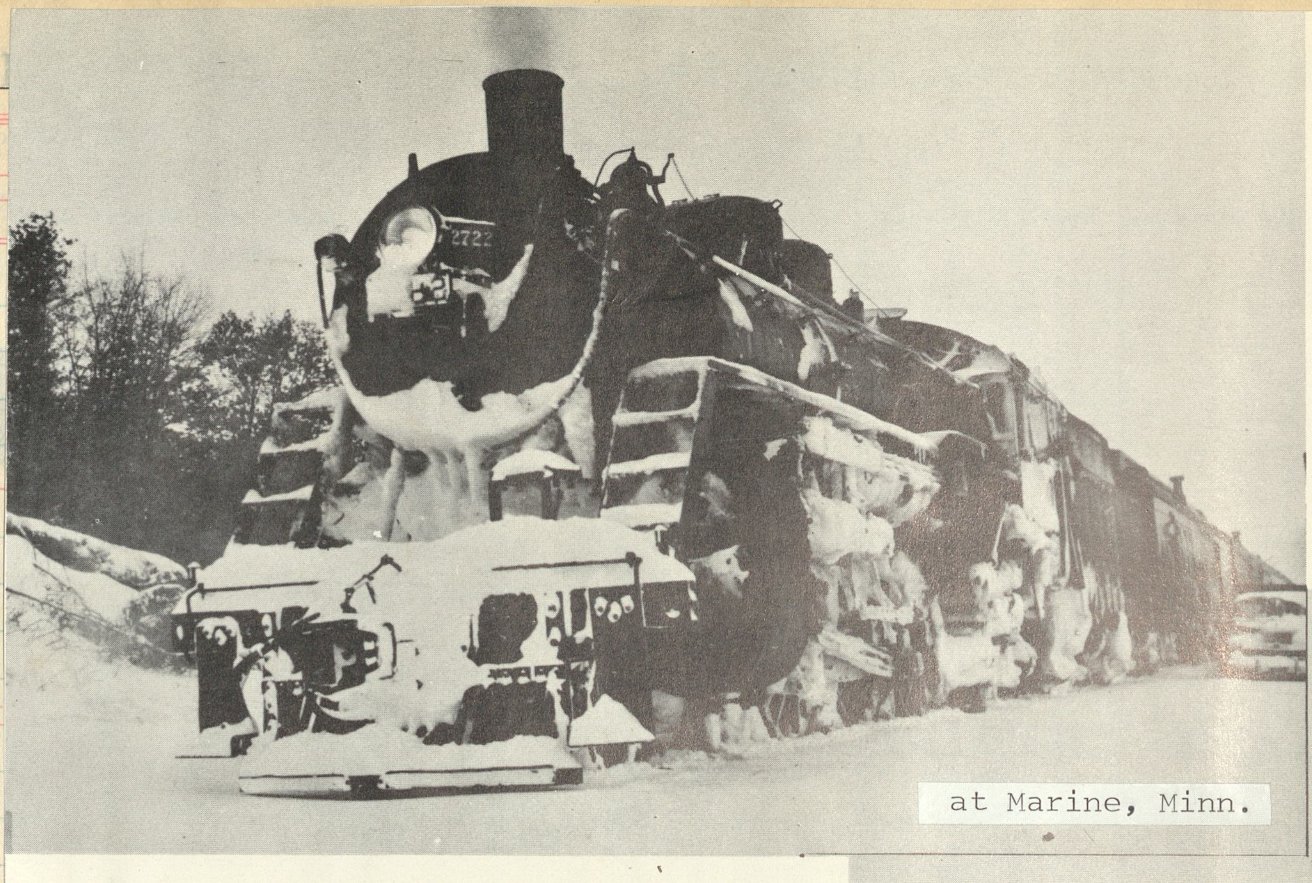
**With the officious bustle, side-rod clanking and prodigious chuffing that only small engines seem to create, Consolidation No. 432 worries docile cars about the yard much as a sheep dog presides over its gentle flock. In the background are shops of the now defunct Wisconsin Central RR. Technically, WC still owns these facilities, but the Soo Line has been operating them since 1909.**

Cls. No. Sold Amount



*International Newsreel Photo*

Train Wreck at Annandale, Minn.



at Marine, Minn.

Seven States are served by the Soo Line and all of them get their share of winter snow. No. 7 has gathered plenty of snow on its 500-mile overnight run from Sault Ste. Marie, Michigan to Minneapolis.

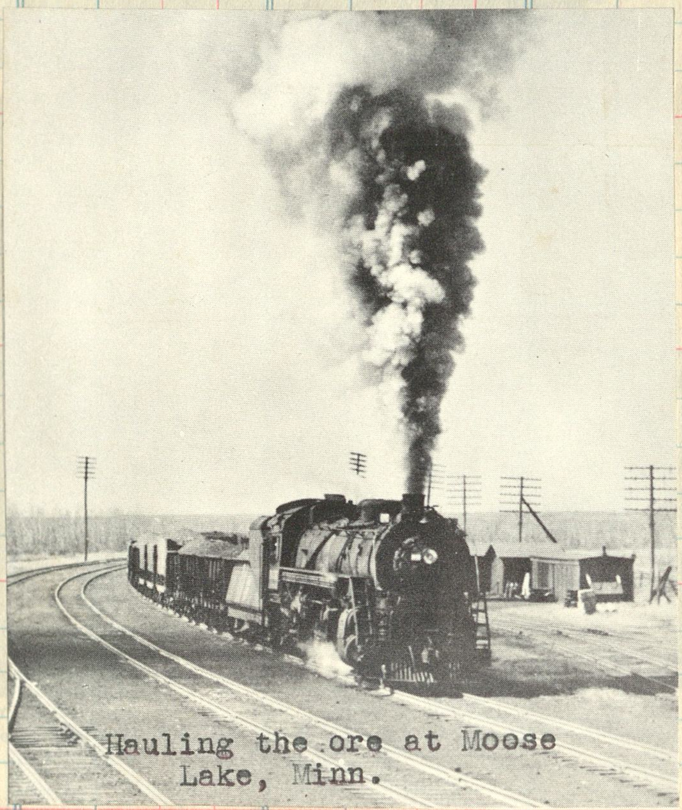
**ST. PAUL-MINNEAPOLIS and MONTREAL EXPRESS**

**Trains Nos. 7 and 8, daily**

Lounge Sleeper......Twin Cities and S. S. Marie (AC)
Cafe Parlor............S. S. Marie and Sudbury
Standard Sleeper...Sudbury and Montreal (AC)
Diner.. .... ..............Twin Cities and Montreal
Coaches..................Twin Cities and Montreal

**For complete table see page 11**

| 8 | 1938 | 7 |
|---|---|---|
| P. M. | | A. M. |
| * 7.40 | Lv...Minneapolis...Ar | 8.15 |
| 8.25 | Lv.....St. Paul.....Ar | 7.38 |
| 3.17 | ......Rhinelander...... | 1.02 |
| 12.35 | Ar. Sault Ste. Marie. Lv | 3 30 |
| 6.55 | Ar......Ottawa......Lv | 10.10 |
| 9.20 | Ar.... Montreal ....Lv | * 7.50 |
| A. M. | | P. M. |

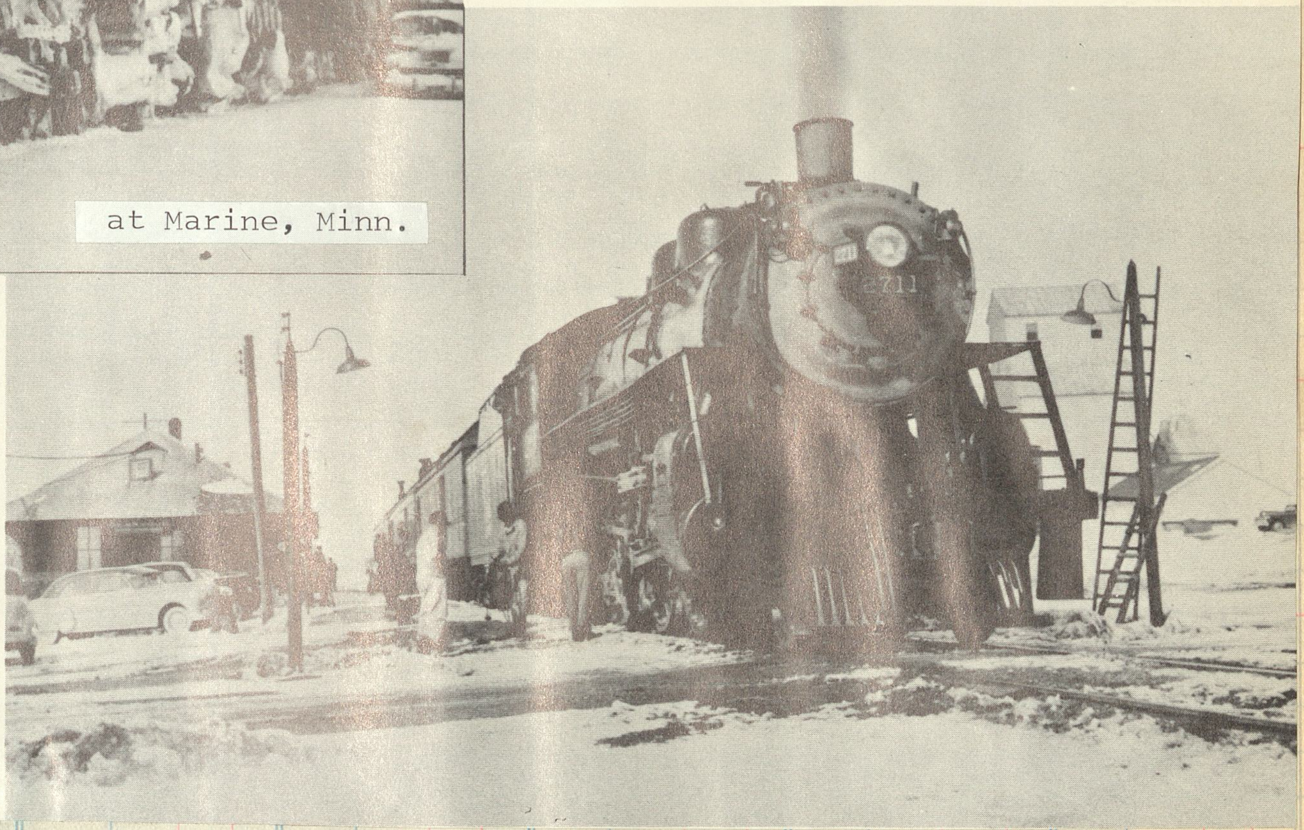


Hauling the ore at Moose Lake, Minn.

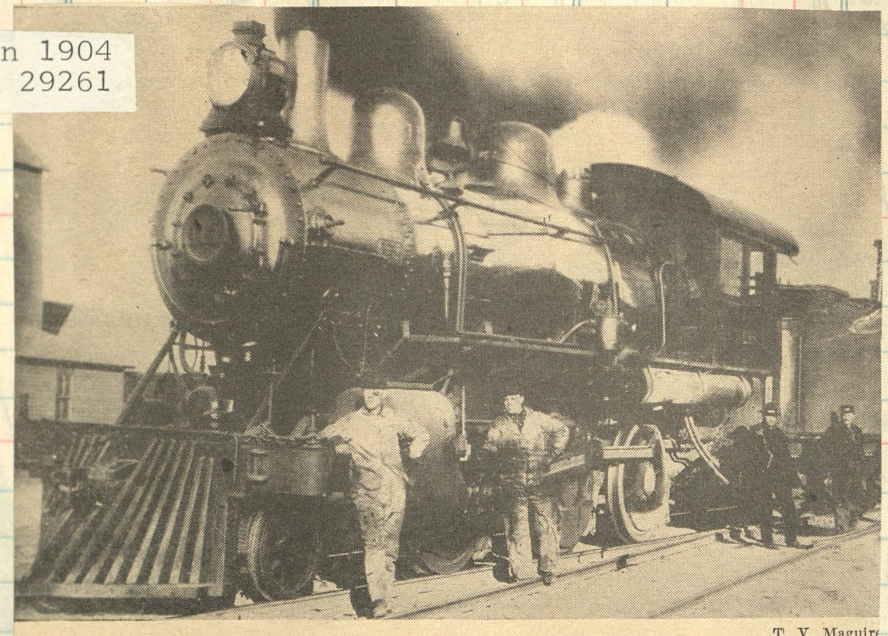
We will stop for twenty minutes at Glenwood to service the engine and get lunch for the passengers and crew. Then we will load the mail, baggage and express, and in three hours we will be pulling into Minneapolis on the "Enderlin Local."

**STATION LUNCH ROOMS**

Station Lunch Rooms Serving Excellent Meals at Reasonable Rates are Located at the Following Points:
GLENWOOD, MINN., STEVENS POINT, WIS.
ENDERLIN, HARVEY, PORTAL, WISHEK, N. D.

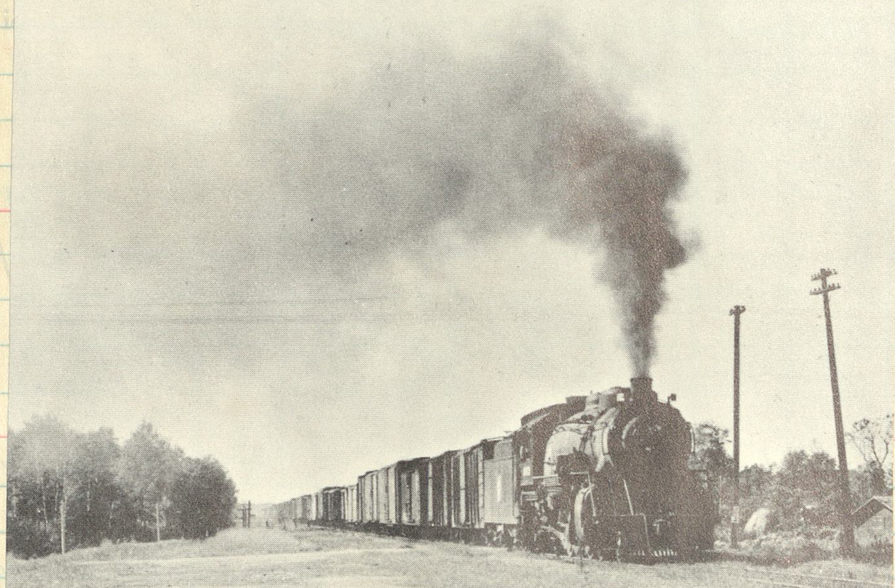


Schen 1904
c/n 29261

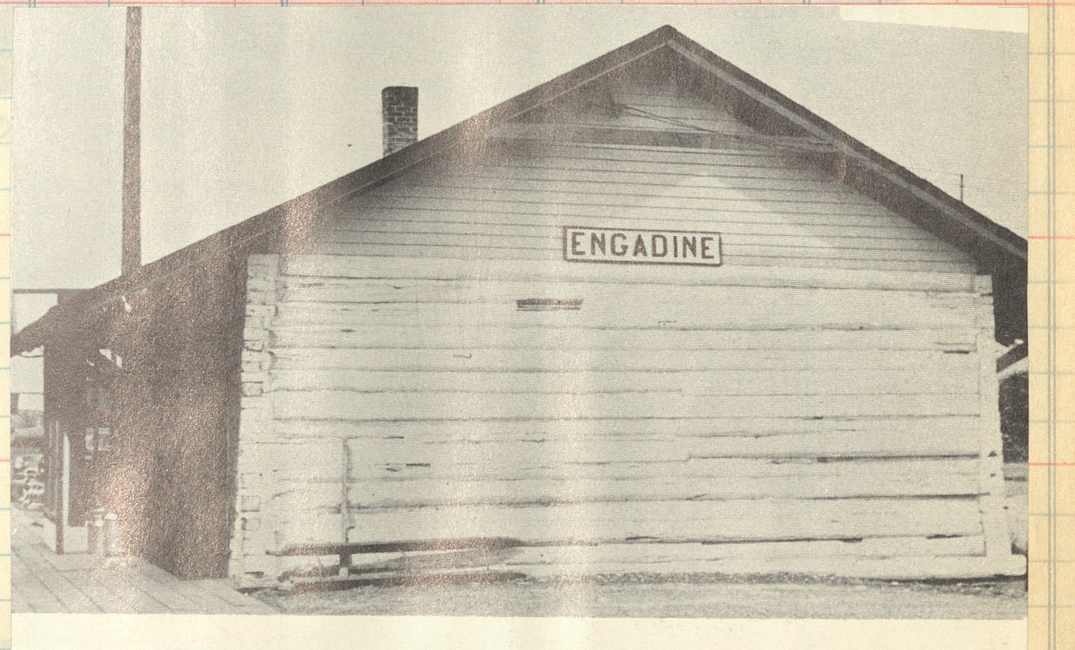


SOO LINE'S OLD ENGINE 113 AS IT APPEARED IN 1905

T. V. Maguire

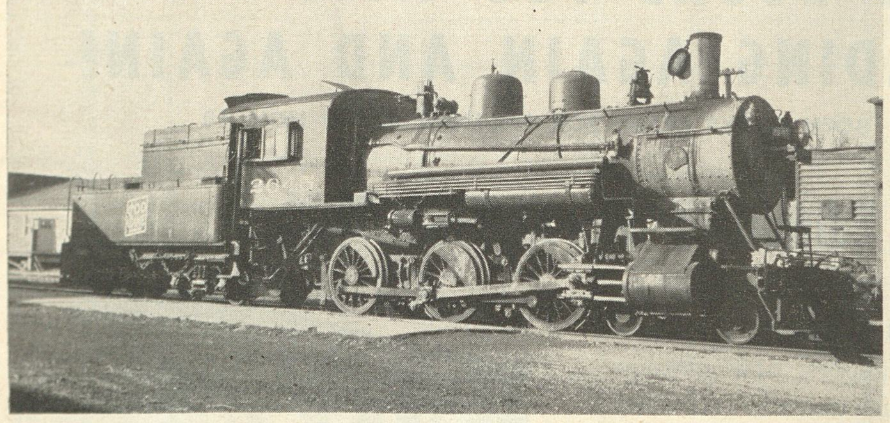


A grain extra on the "Brooten Line"

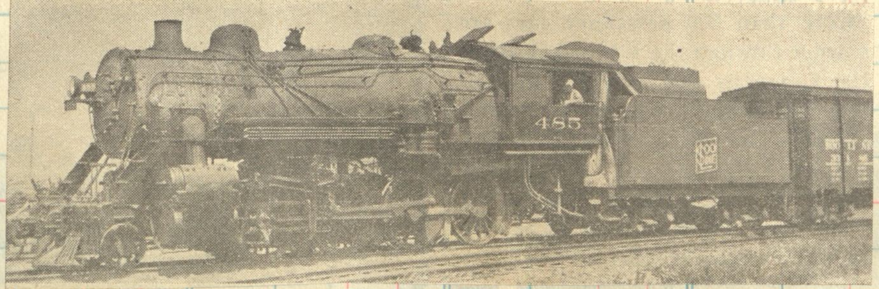


**THE LITTLE LOG DEPOT** at Engadine, Michigan still stands, reflecting the logging days of the past. In 1887 the Soo Line, then called the Minneapolis-Sault St. Marie and Atlantic, completed its original line from Minneapolis to the "Soo". No. 8 makes a regular station stop at Engadine.

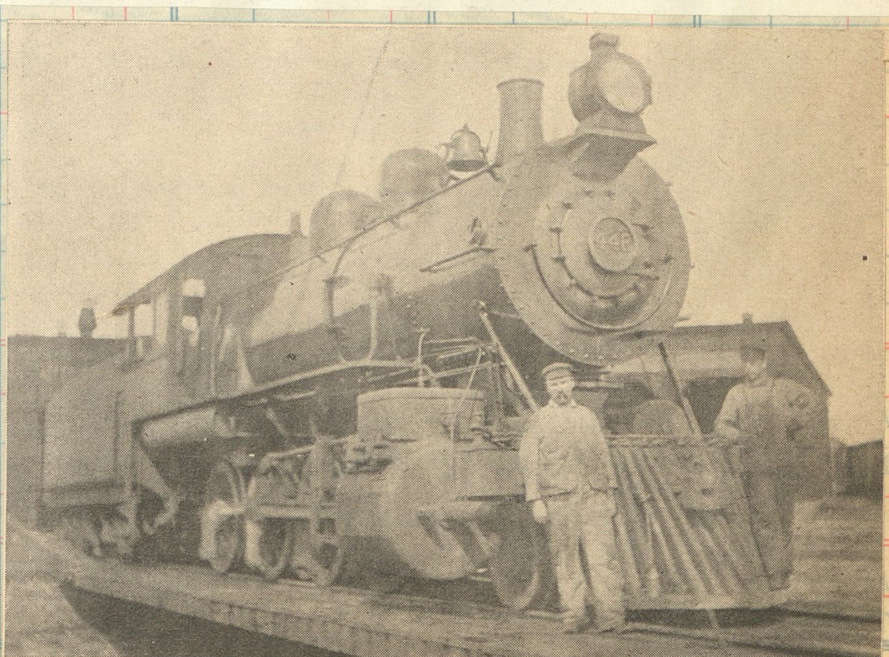
W.C. 2645 Blt by Brooks 1900



Jim Scribbins



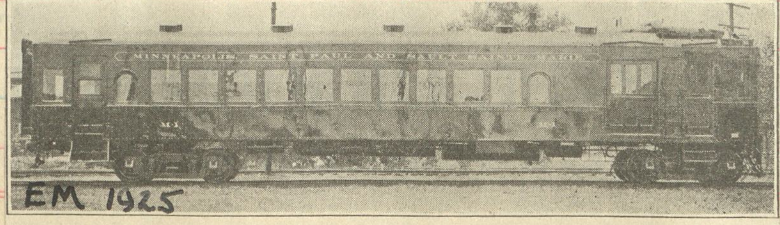
485 class F-12 c/n 51323 Schen 1912



Schen 1903

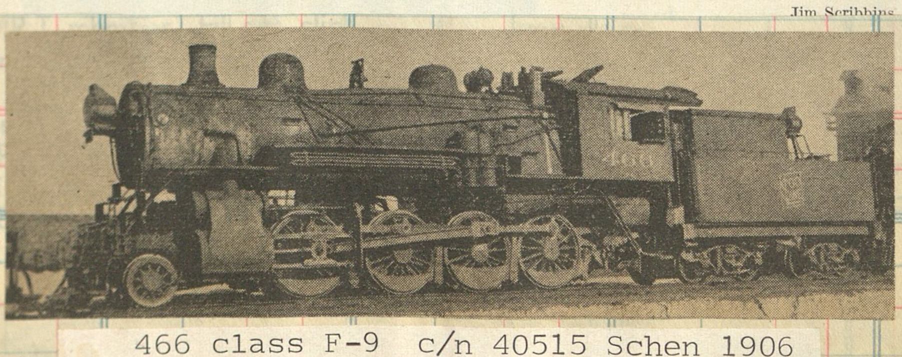
ON TURNTABLE AT RHINELANDER, WIS.

Locomotive 442 of the Minneapolis, St. Paul & Sault Ste. Marie was photographed in 1903.

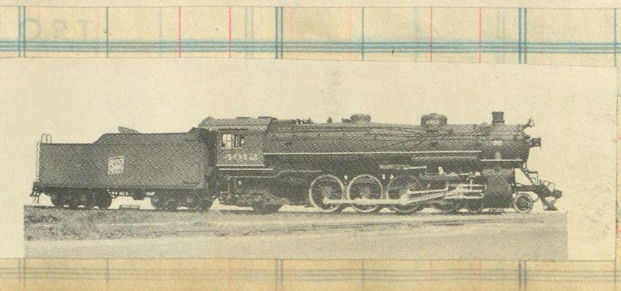


EM 1925

*Soo Line, M-1—320 miles a day hauling a 34-ton coach. Main line run.*

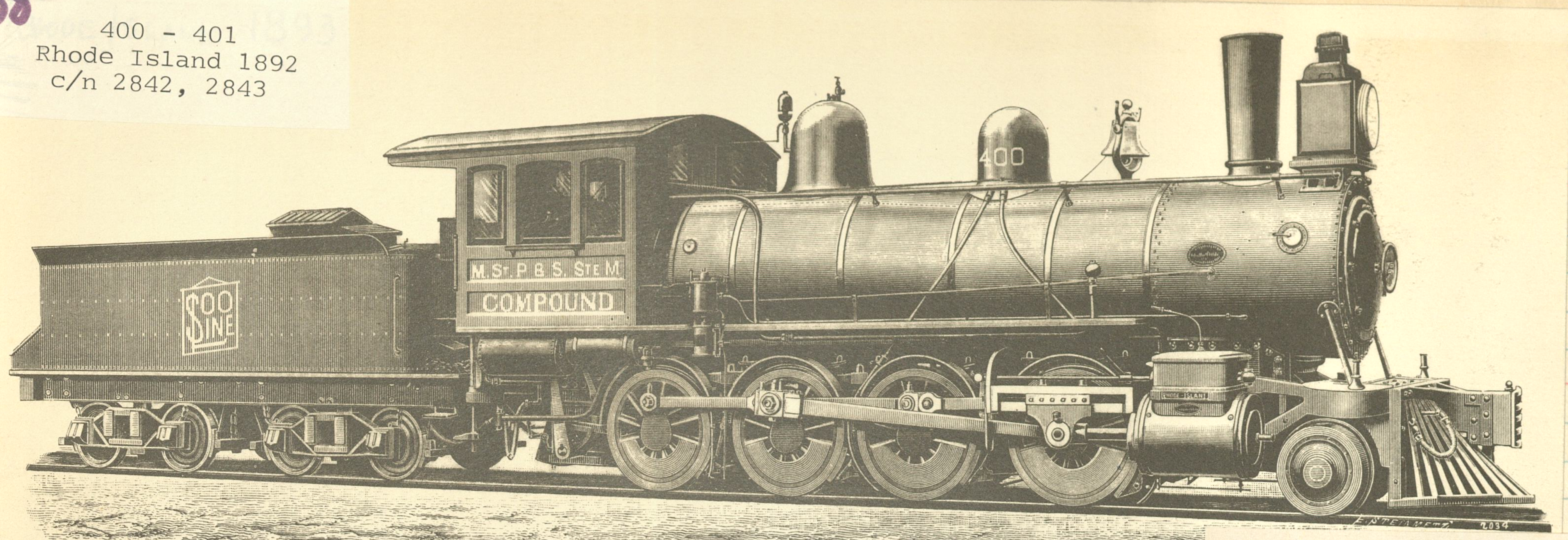


466 class F-9 c/n 40515 Schen 1906



188

400 - 401
Rhode Island 1892
c/n 2842, 2843

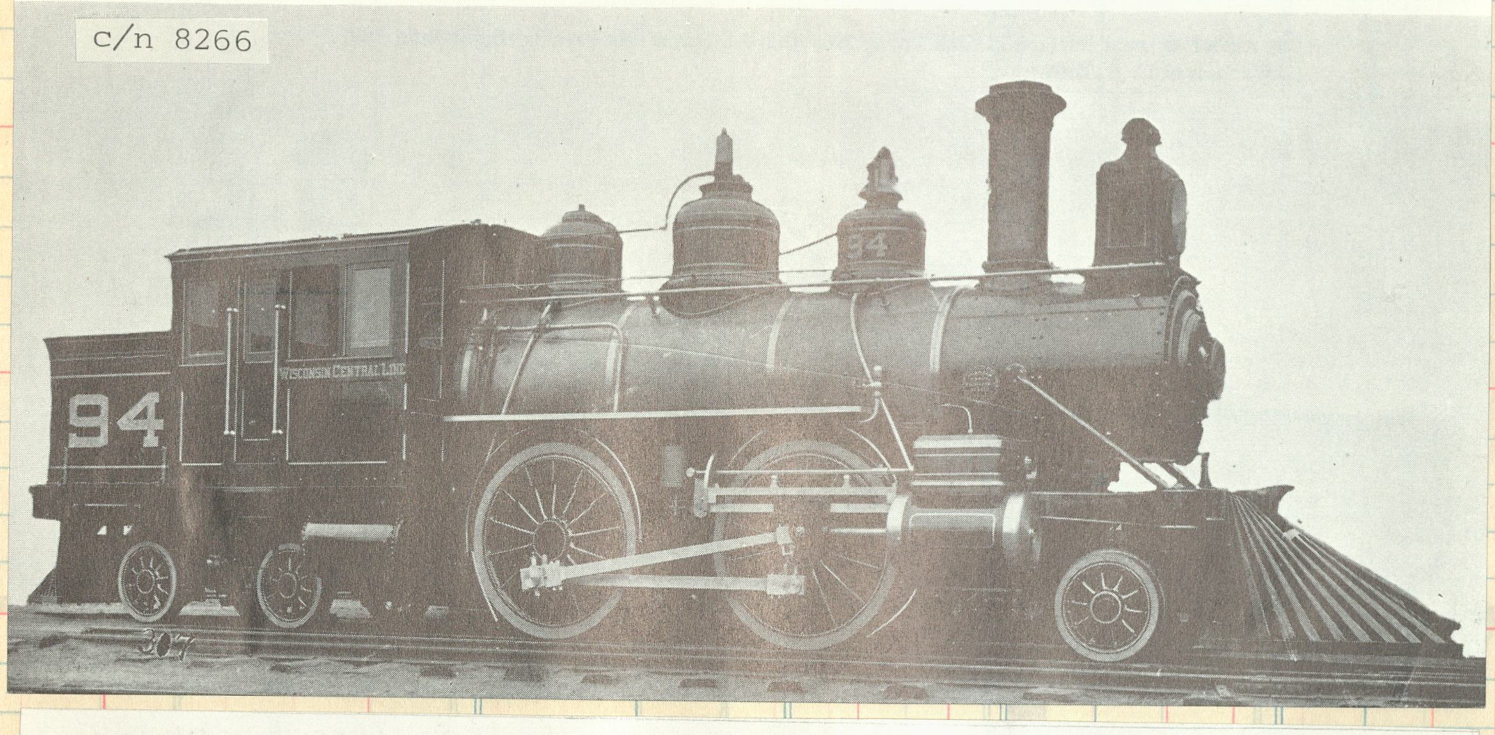


505 - 507
Baldwin 1902

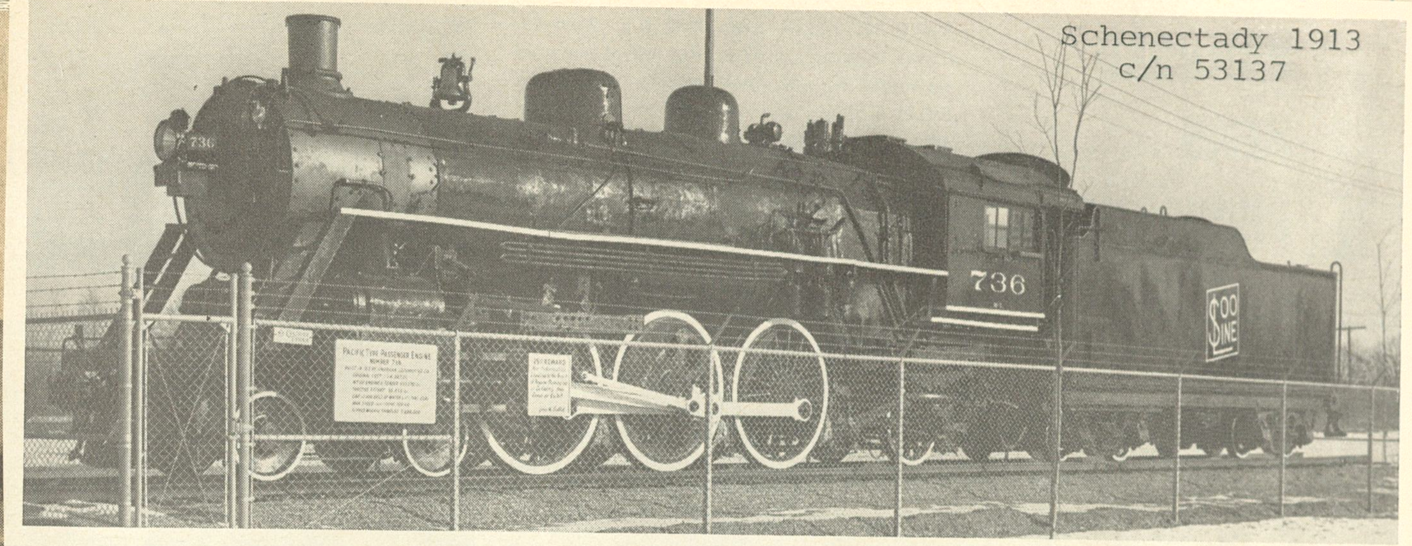
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RY. (SOO LINE) ENGINE 505
This picture of the old engine and crew was taken in the summer of 1904. At that time the engine was in regular passenger service between Harvey and Portal, N. D. Photo was sub-

**NO. 94 WAS BUILT** for the Wisconsin Central Lines in 1886. She later became Chicago Great Western 624, and finally ended up on the Baltimore and Ohio. (Collection of C. A. Brown)

c/n 8266

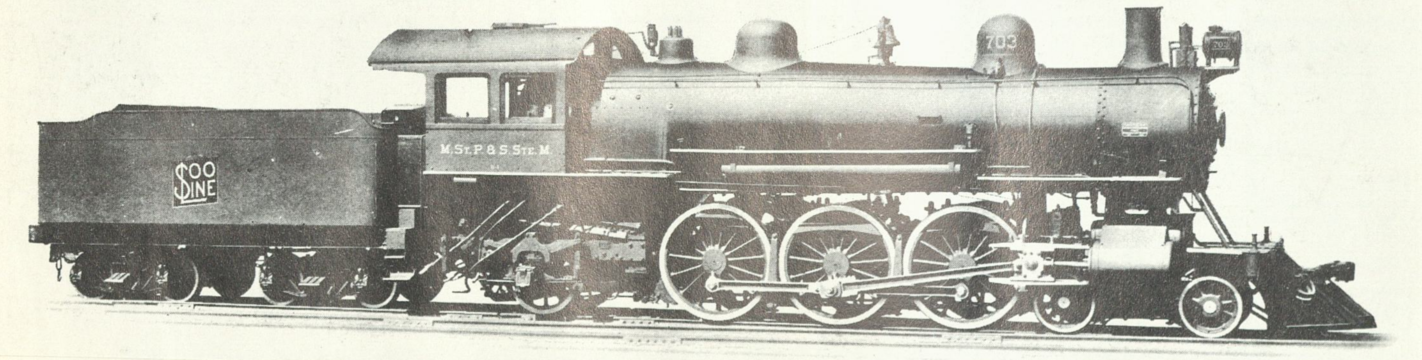


Schenectady 1913
c/n 53137



Appleton *Post Crescent.*

**JOHN M. BALLIET**—Appleton (Wis.) insurance man, P&LE director, and **TRAINS** reader—asked Soo to donate Pacific 4-6-2 736 to Appleton, then paid the costs of moving the engine from Gladstone, Mich., mounting her, and installing fence around her.



701-708
Schenectady 1904
c/n 29910

PACIFIC TYPE PASSENGER LOCOMOTIVE
*Built for the Minneapolis, St. Paul & Sault Sainte Marie Railway*

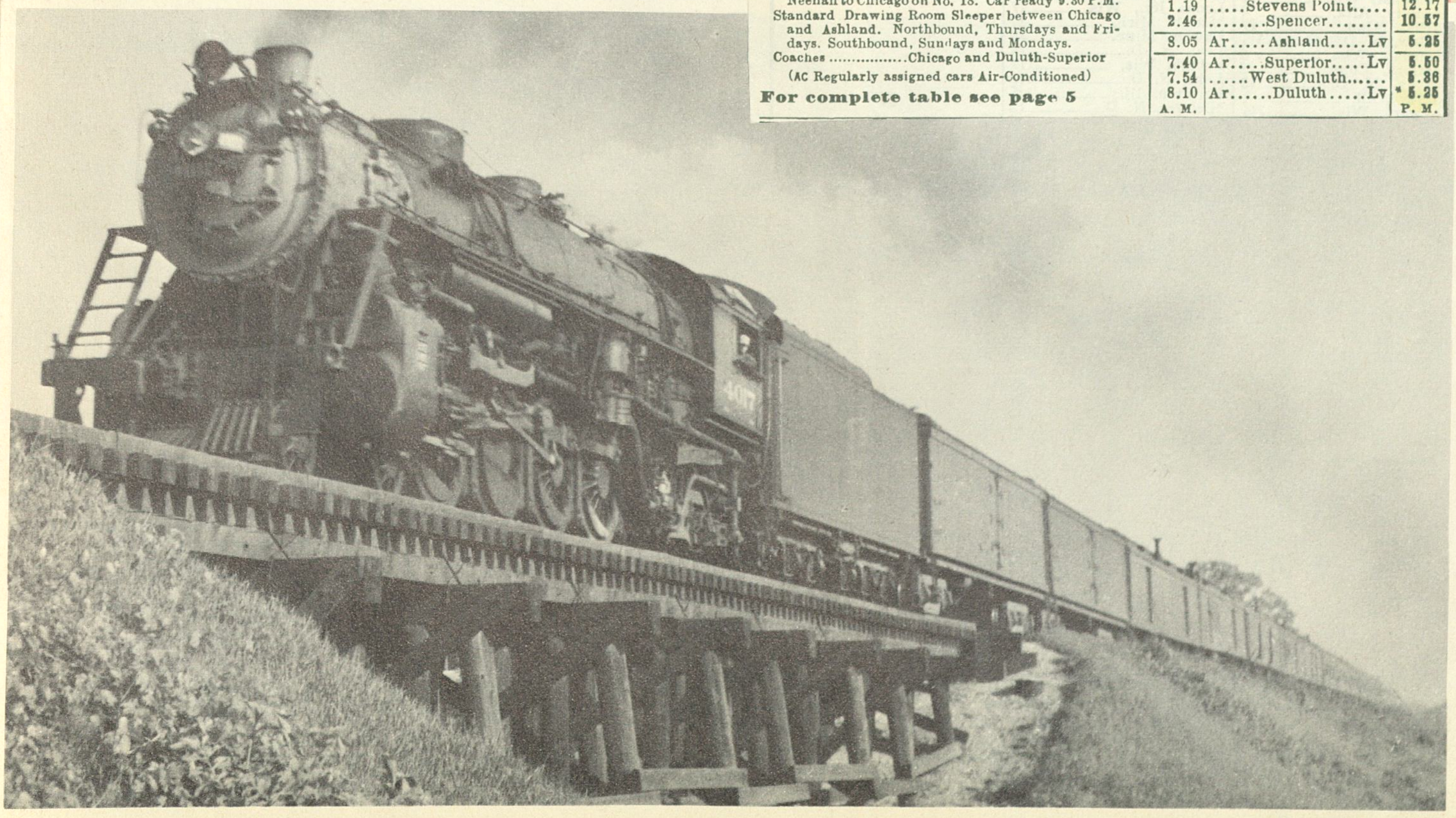
**CHICAGO, DULUTH - SUPERIOR EXPRESS**

**Trains Nos. 17 and 18, daily**

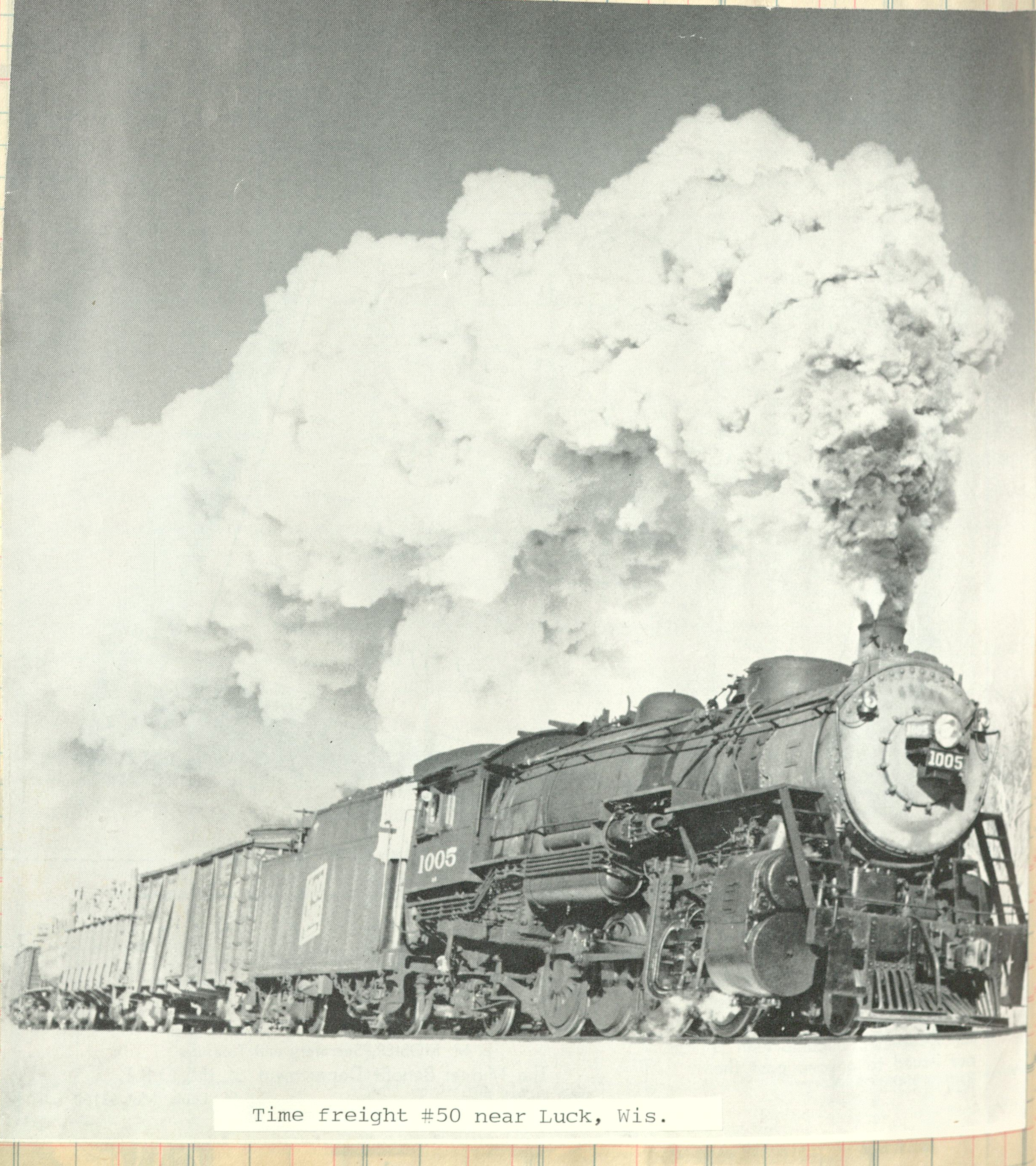
Lounge Cars (AC)......Chicago and Duluth-Superior
Standard 8 Section Restaurant Sleeper (AC).........Chicago and Duluth-Superior
Drawing Room Compartment Sleeper (AC) Neenah to Chicago on No. 18. Car ready 9.30 P.M.
Standard Drawing Room Sleeper between Chicago and Ashland. Northbound, Thursdays and Fridays. Southbound, Sundays and Mondays.
Coaches ................Chicago and Duluth-Superior
(AC Regularly assigned cars Air-Conditioned)

**For complete table see page 5**

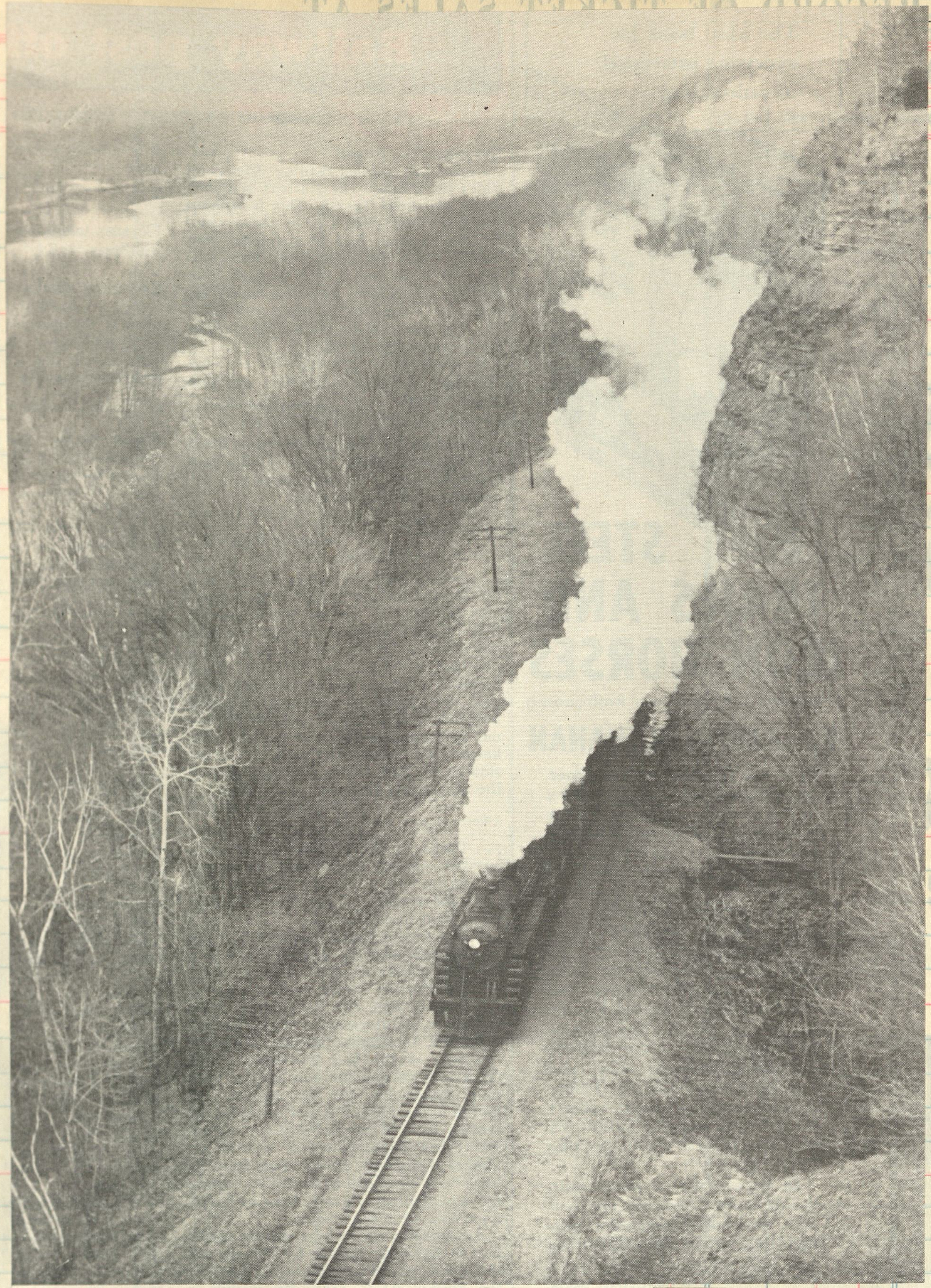
| 17 | 1938 | 18 |
|---|---|---|
| P. M. | | A. M. |
| * 5.50 | Lv.....Chicago......Ar | 7.45 |
| 8.45 | .......Waukesha....... | 4.51 |
| 10.10 | ......Fond du Lac...... | 3.08 |
| 10.58 | ........Oshkosh ....... | 2.23 |
| 11.27 | ........Neenah........ | 1.59 |
| 1.19 | .....Stevens Point..... | 12.17 |
| 2.46 | ........Spencer........ | 10.57 |
| 8.05 | Ar.....Ashland.....Lv | 5.25 |
| 7.40 | Ar.....Superior.....Lv | 5.50 |
| 7.54 | ......West Duluth...... | 5.36 |
| 8.10 | Ar......Duluth .....Lv | * 5.25 |
| A. M. | | P. M. |



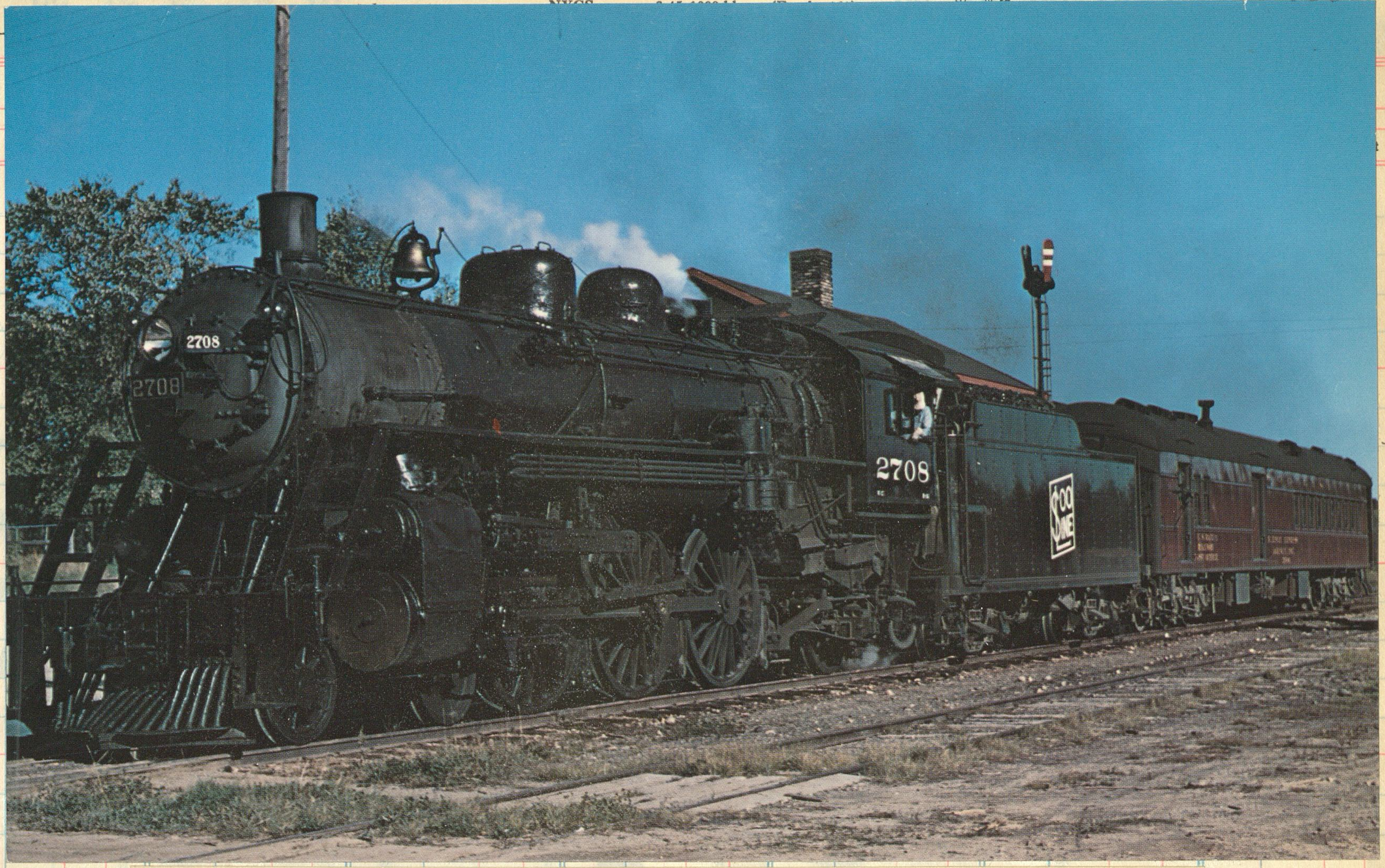
**Minneapolis, St. Paul and Sault St. Marie R.R., passenger train, No. 18, eastbound near Wheeling, Illinois in April 1948.**



Time freight #50 near Luck, Wis.



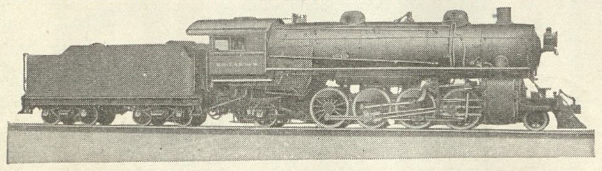
**A LONESOME WHISTLE** echoes off the bluffs along the St. Croix River, then a Pacific nudges into view beneath a plume of white near Osceola, Wis., with the afternoon local from Duluth to the Twin Cities.



One of the ten Pacifics that made up the H-21 class [2704-2713] delivered by Schenectady in 1911 (c/n 49791) on a single car local, #65, at Leonard, Minn.

*Photo Copyright by International Film Service*

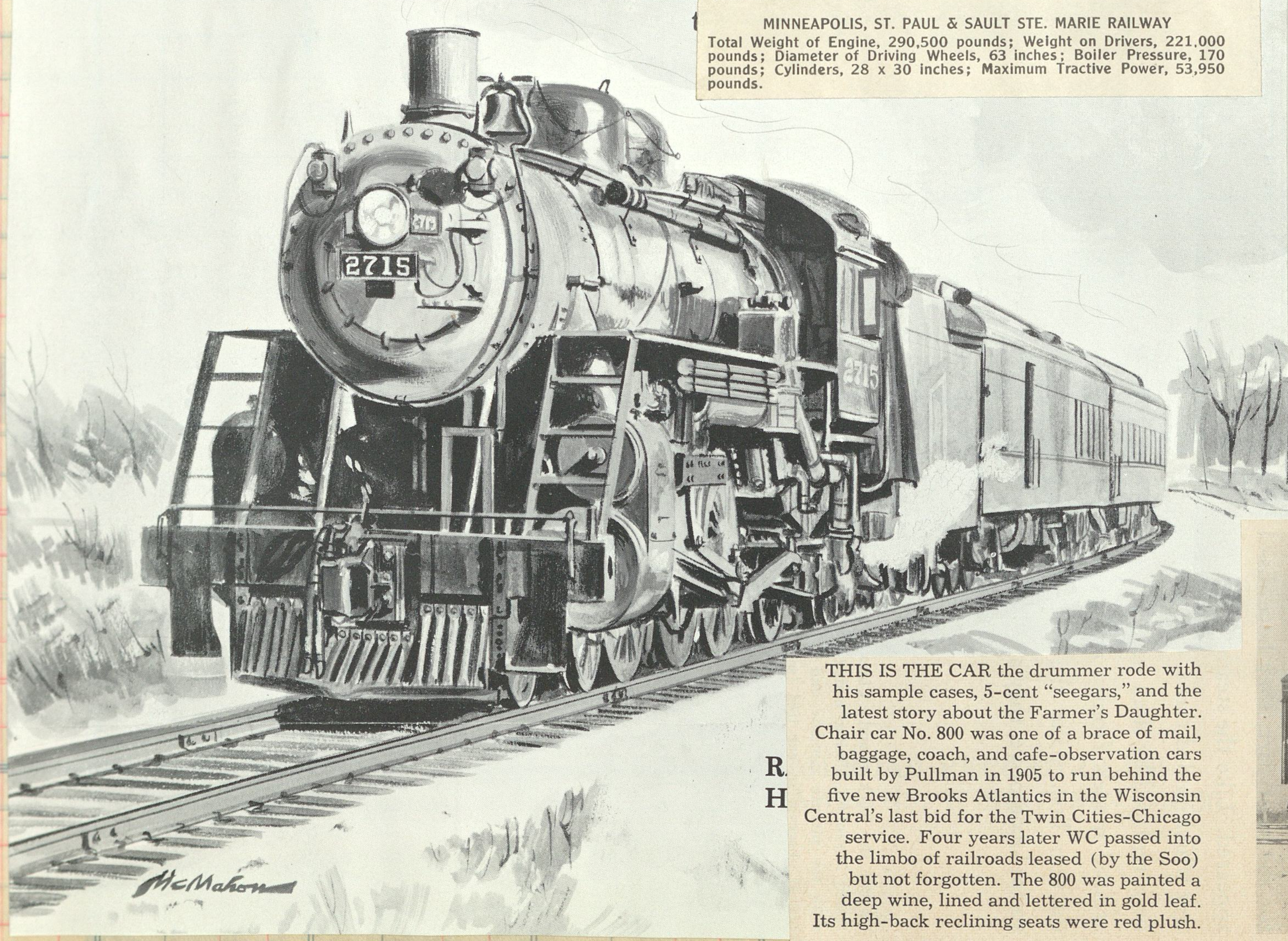
Winter "Gets on the Job" in Chicago 1918



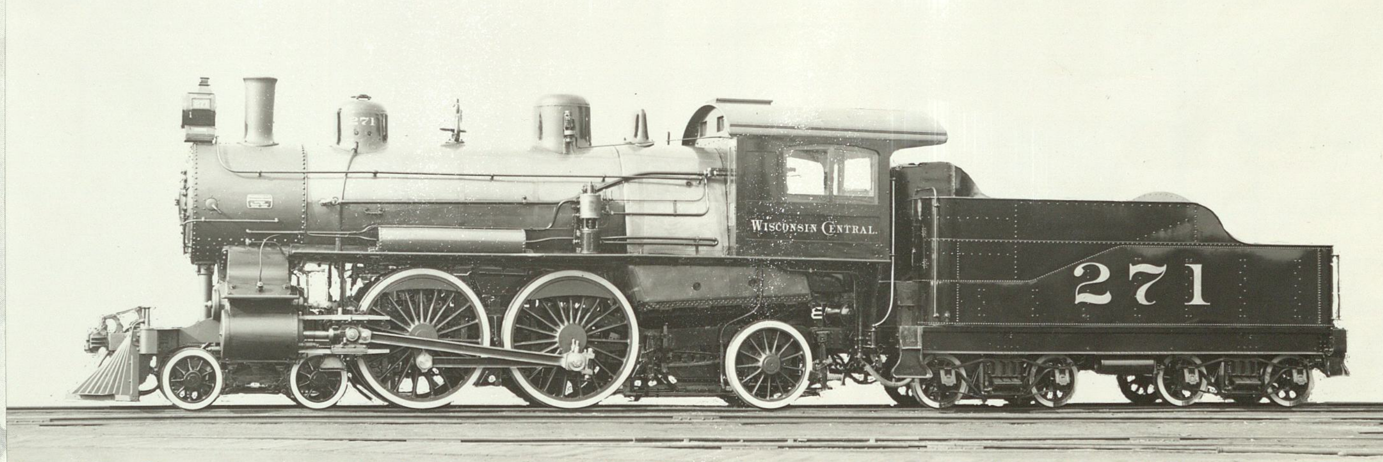
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY

Total Weight of Engine, 290,500 pounds; Weight on Drivers, 221,000 pounds; Diameter of Driving Wheels, 63 inches; Boiler Pressure, 170 pounds; Cylinders, 28 x 30 inches; Maximum Tractive Power, 53,950 pounds.

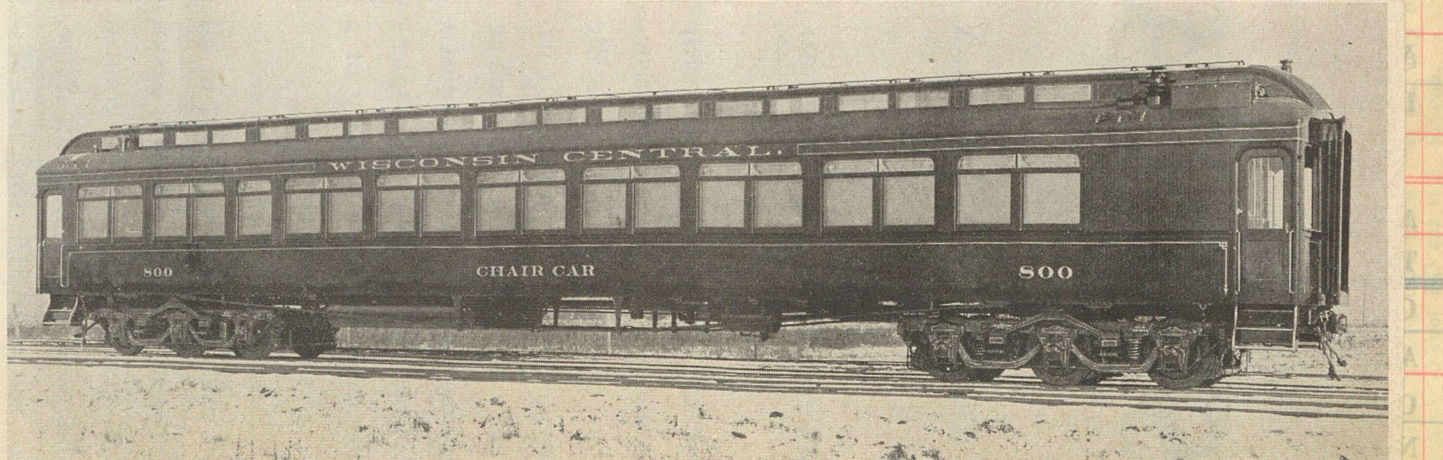
t



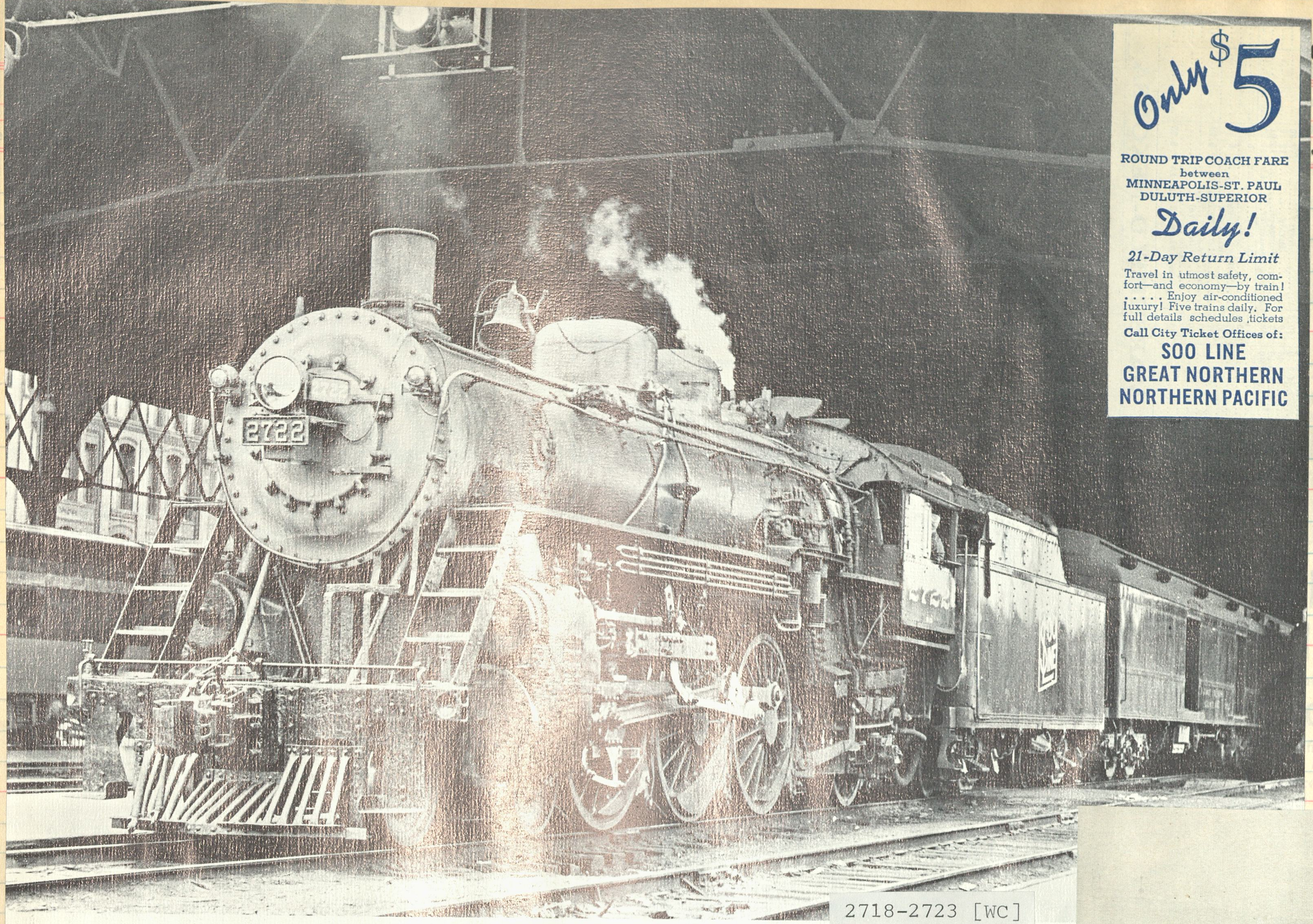
R.
H



Perfection in the art of locomotive construction! This elegant and charming Atlantic was delivered to the Wisconsin Central by Brooks in 1905 [c/n 37602]. Five were built noed 267-271. The 271 later renoed Soo Line #2914.



THIS IS THE CAR the drummer rode with his sample cases, 5-cent "seegars," and the latest story about the Farmer's Daughter. Chair car No. 800 was one of a brace of mail, baggage, coach, and cafe-observation cars built by Pullman in 1905 to run behind the five new Brooks Atlantics in the Wisconsin Central's last bid for the Twin Cities-Chicago service. Four years later WC passed into the limbo of railroads leased (by the Soo) but not forgotten. The 800 was painted a deep wine, lined and lettered in gold leaf. Its high-back reclining seats were red plush.



*Only* $5

ROUND TRIP COACH FARE
between
MINNEAPOLIS-ST. PAUL
DULUTH-SUPERIOR

*Daily!*

*21-Day Return Limit*

Travel in utmost safety, comfort—and economy—by train! . . . . . Enjoy air-conditioned luxury! Five trains daily. For full details schedules ,tickets

**Call City Ticket Offices of:**

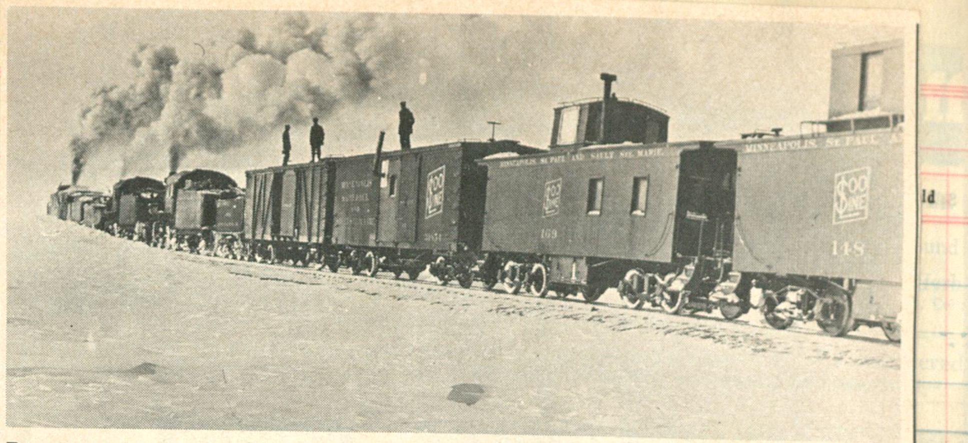
**SOO LINE**
**GREAT NORTHERN**
**NORTHERN PACIFIC**

2718-2723 [WC]
Schen 1923

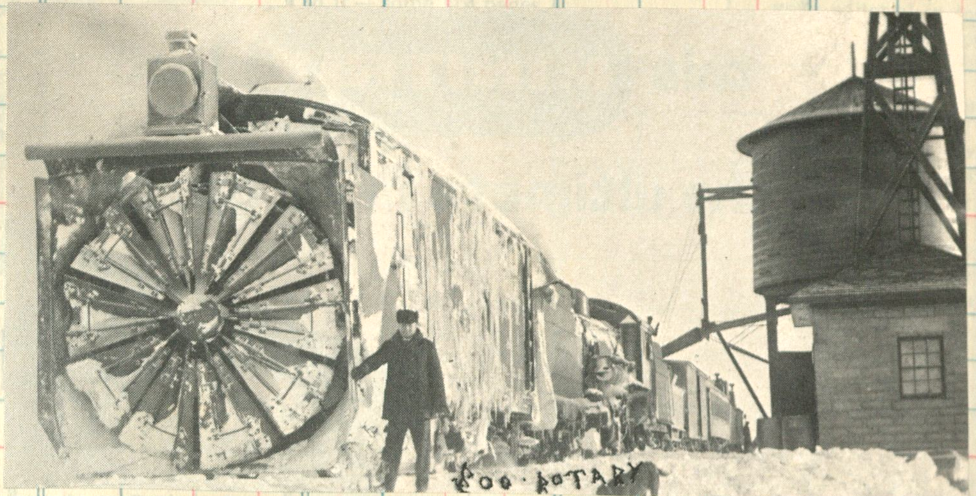
TRN #62

Soo Line 2722, a 4-6-2, ready to leave the Milwaukee Road depot in Minneapolis, Minn. with a local for Duluth. 1948

**JOINT SERVICE—TWIN CITIES—DULUTH—SUPERIOR**
Through tickets issued for Soo Line trains will be honored on N. P. and G. N. trains and vice versa

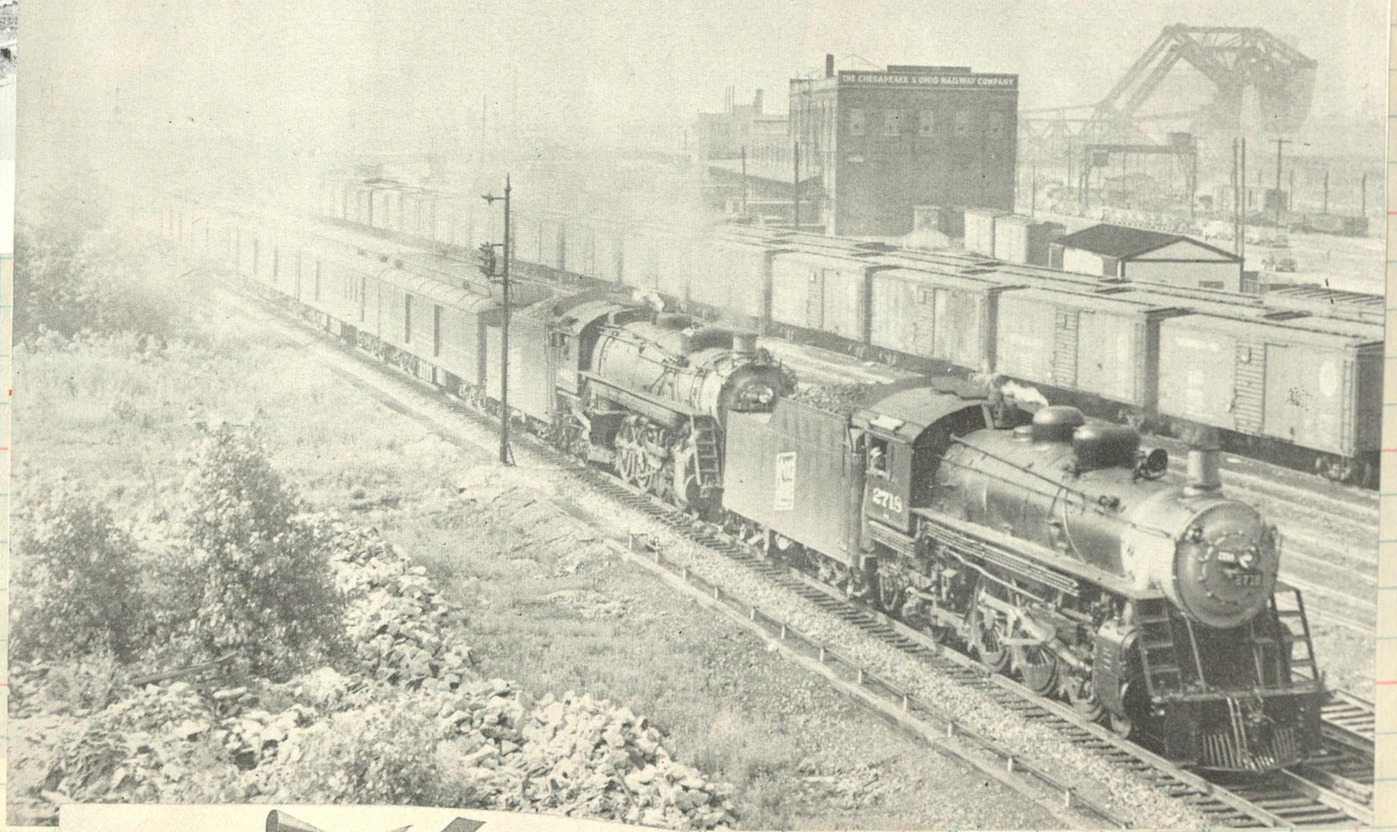


Two scenes dating back to 1916 on the Soo Line show (left) a steam rotary plow and (above) a pair of locomotives pushing hard as the steam plow enters a cut near Raymond, Mont.

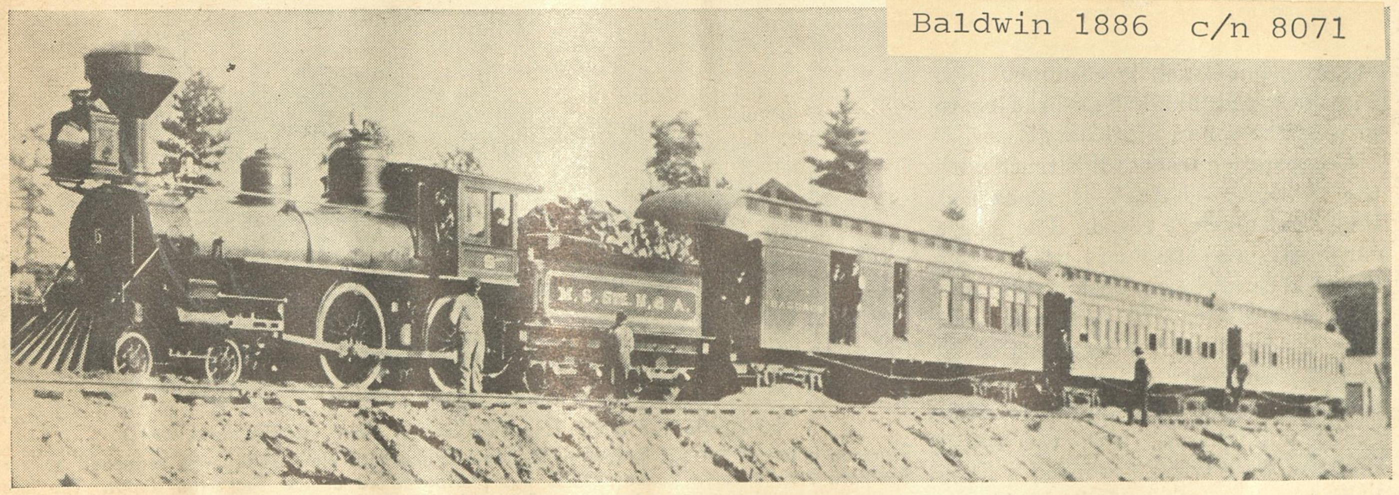


↓**IT'S 104 DEGREES in Chicago early in the morning as a Pacific and a Mountain near Grand Central with the overnight limited from Duluth and the Twin Cities.**

Rail Photo Service: Robert E. Heureman.

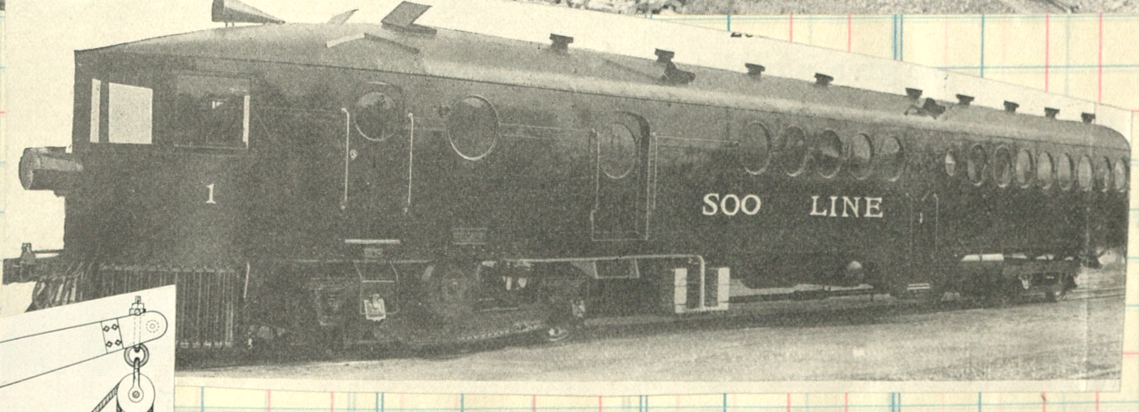


Baldwin 1886 c/n 8071



FIRST SOO LINE TRAIN TO ENTER TWIN CITIES

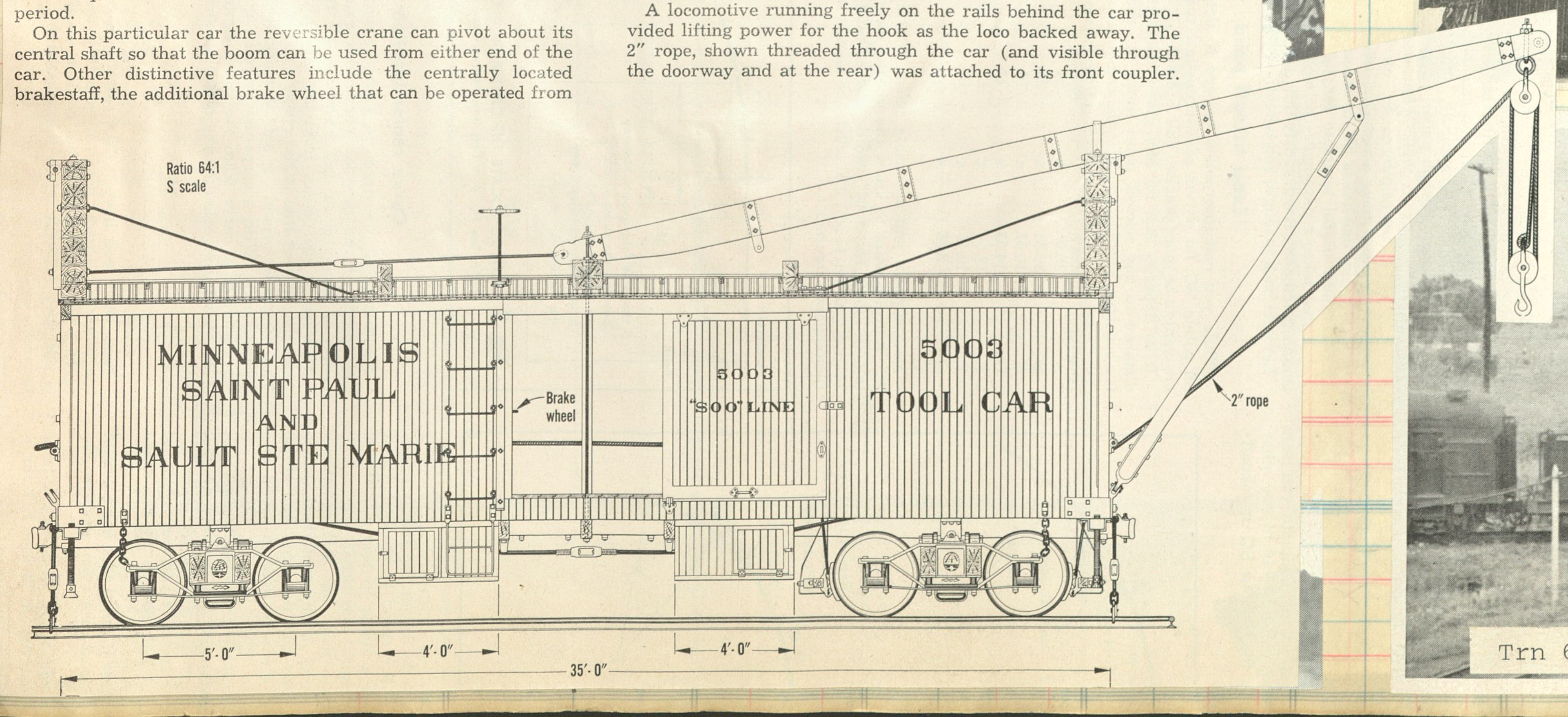
Locomotive 6 of the old M. S. Ste. M. & A., now the Minneapolis, St. Paul & Sault Ste. Marie, made the first trip over the new line into St. Paul and Minneapolis in 1886.

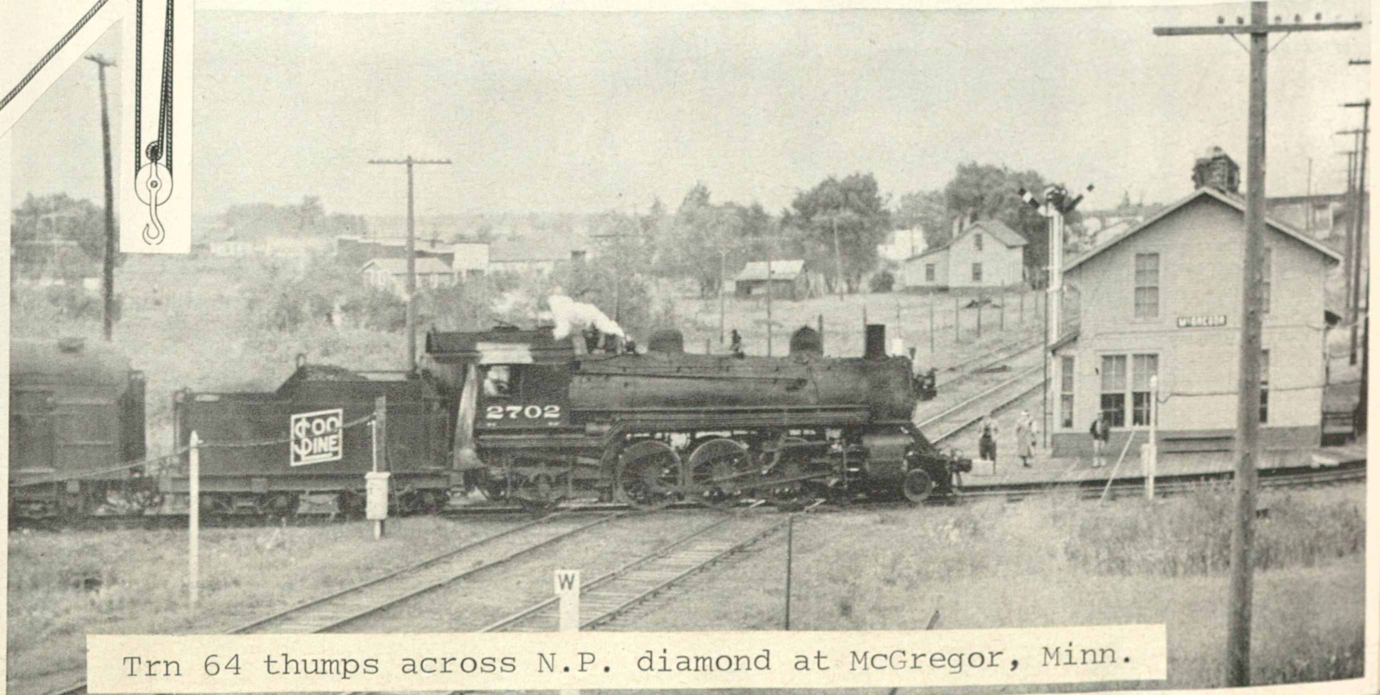


SOO LINE tool and crane car no. 5003 is typical of the wreck-clearing units used by many railroads during the 1880's. It was adequate to lift the small locomotives and light cars of that period.

On this particular car the reversible crane can pivot about its central shaft so that the boom can be used from either end of the car. Other distinctive features include the centrally located brakestaff, the additional brake wheel that can be operated from inside the car, and the screw fixtures that clamp the brake shoes tightly against the wheels and the car to the rails during crane operation.

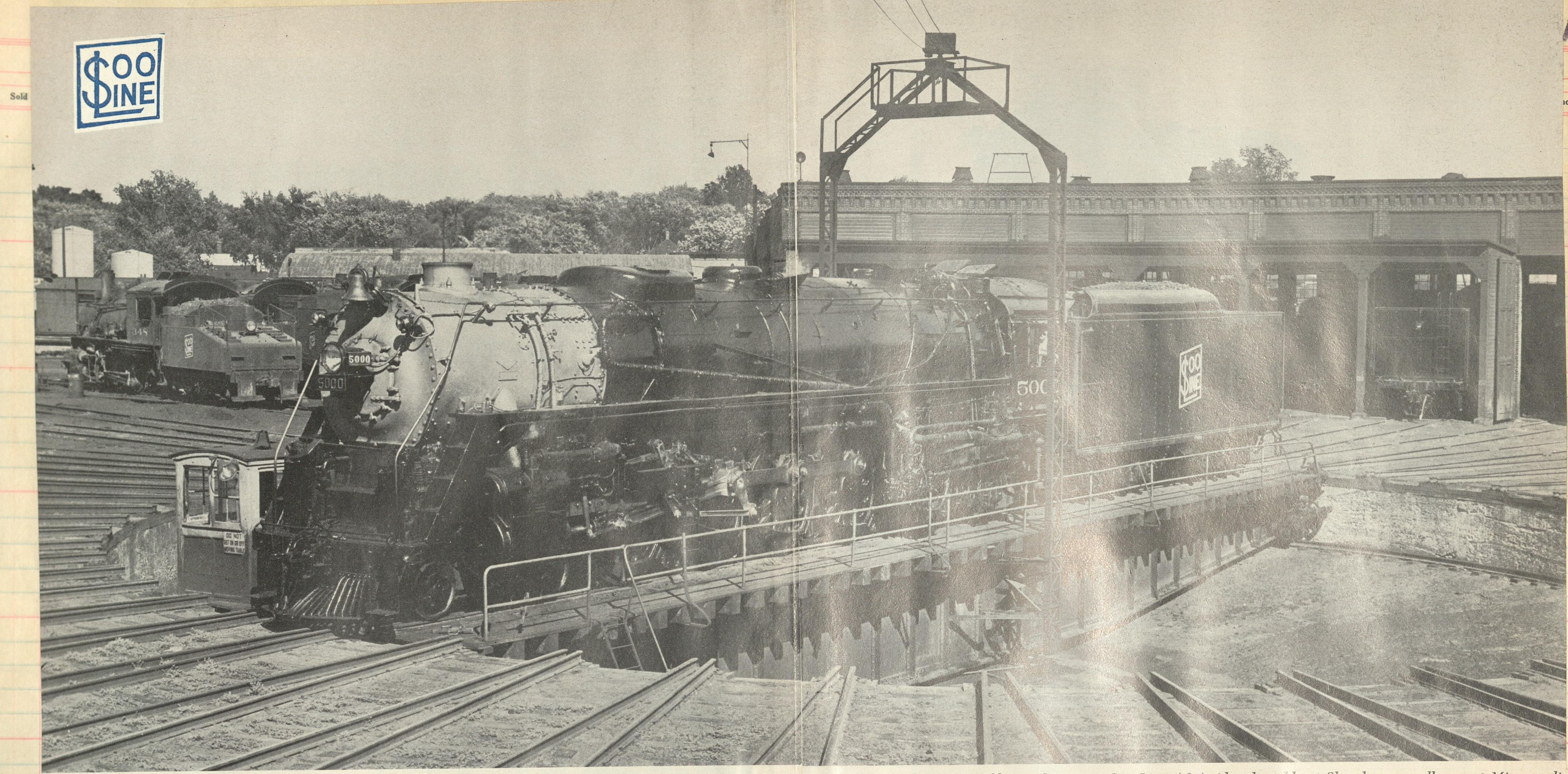
A locomotive running freely on the rails behind the car provided lifting power for the hook as the loco backed away. The 2" rope, shown threaded through the car (and visible through the doorway and at the rear) was attached to its front coupler.



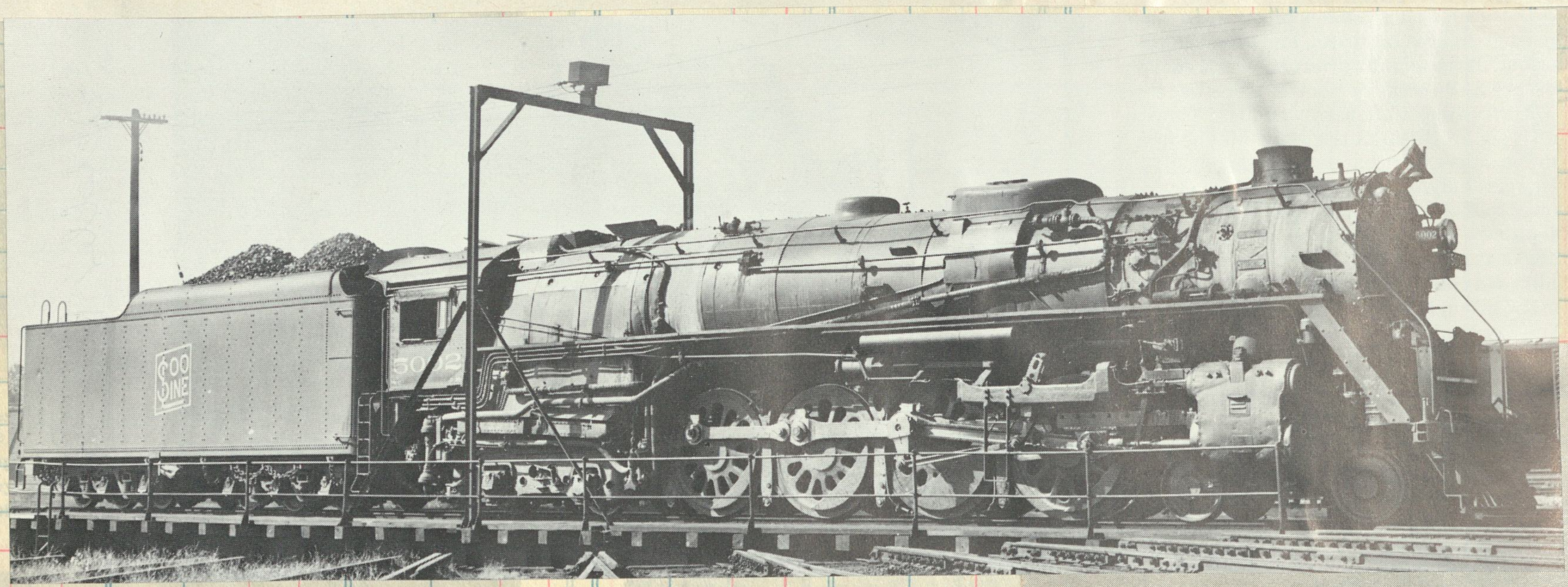


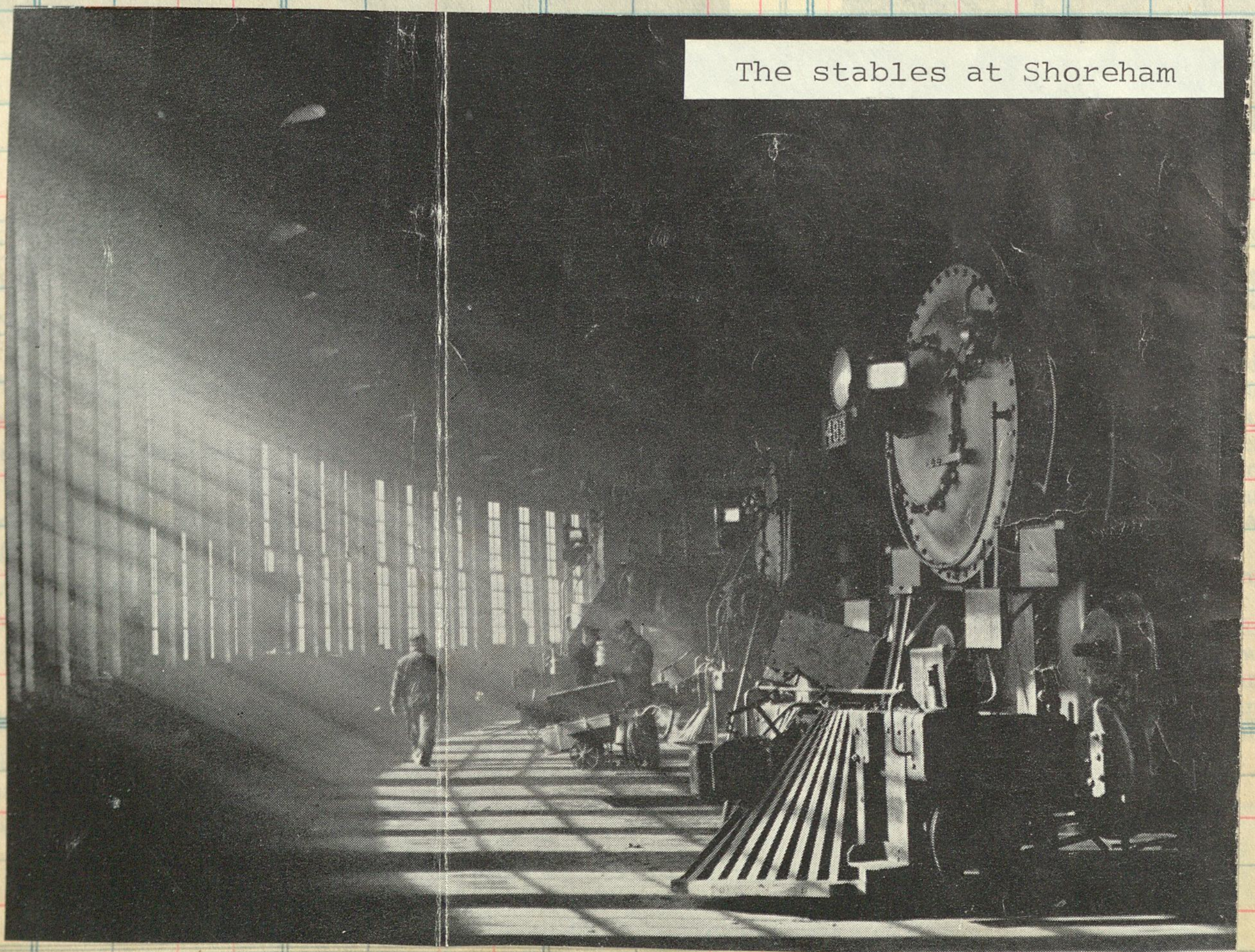
Trn 64 thumps across N.P. diamond at McGregor, Minn.

Clos. No. Sold mount

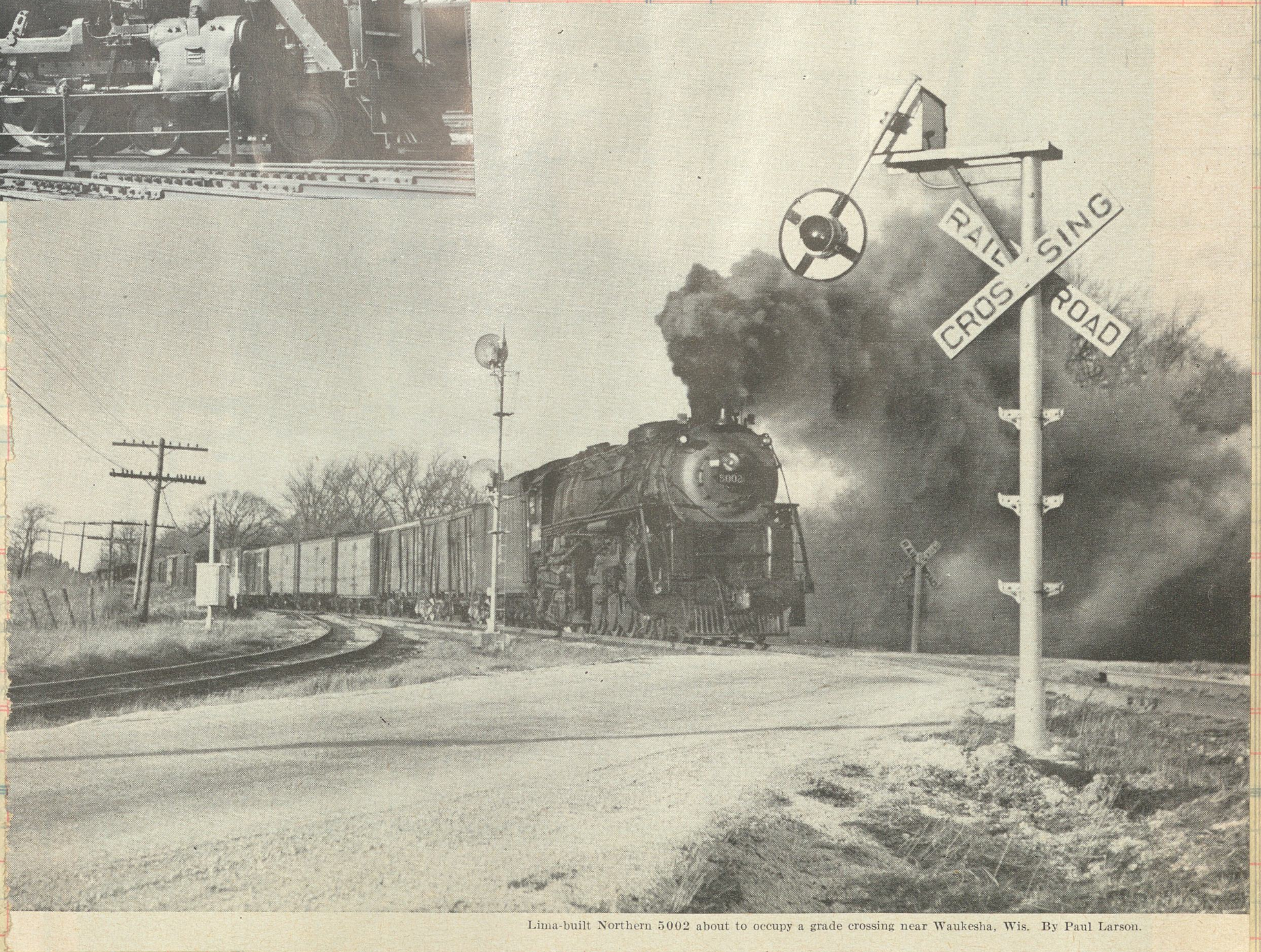


*HER fresh paint sparkles in the sun as Soo Line 4-8-4 rides the table at Shoreham roundhouse at Minneapolis*

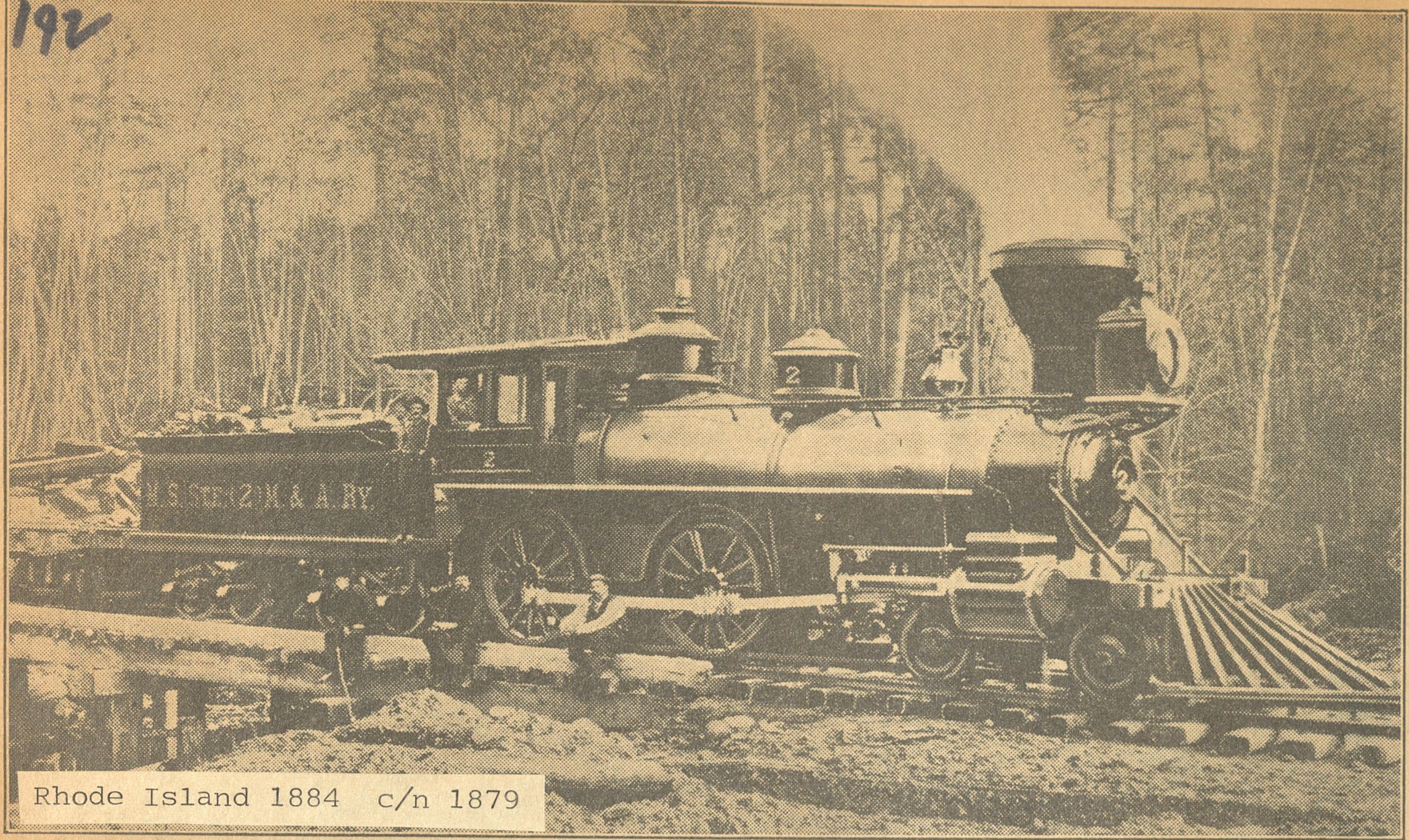




The stables at Shoreham

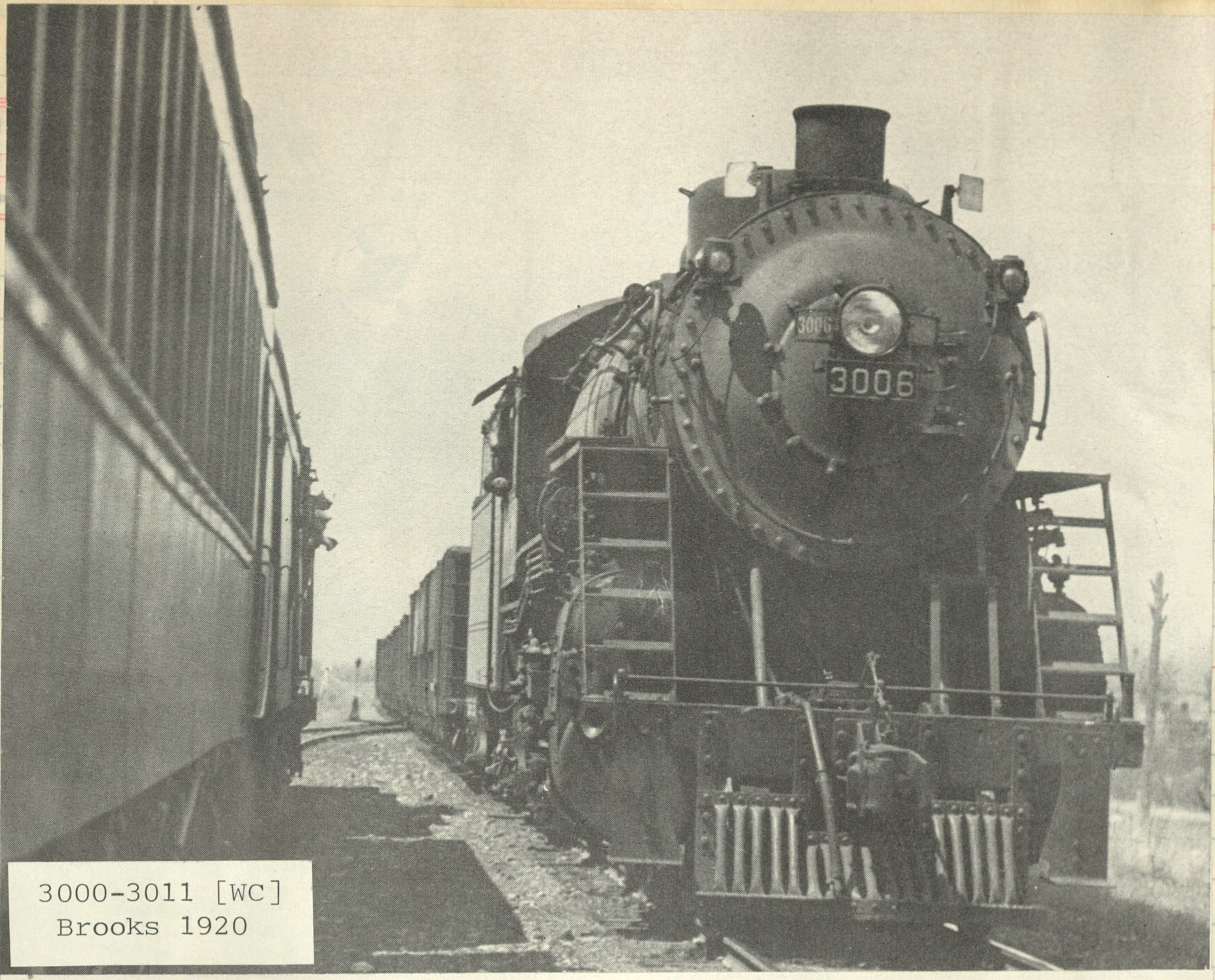


Lima-built Northern 5002 about to occupy a grade crossing near Waukesha, Wis. By Paul Larson.



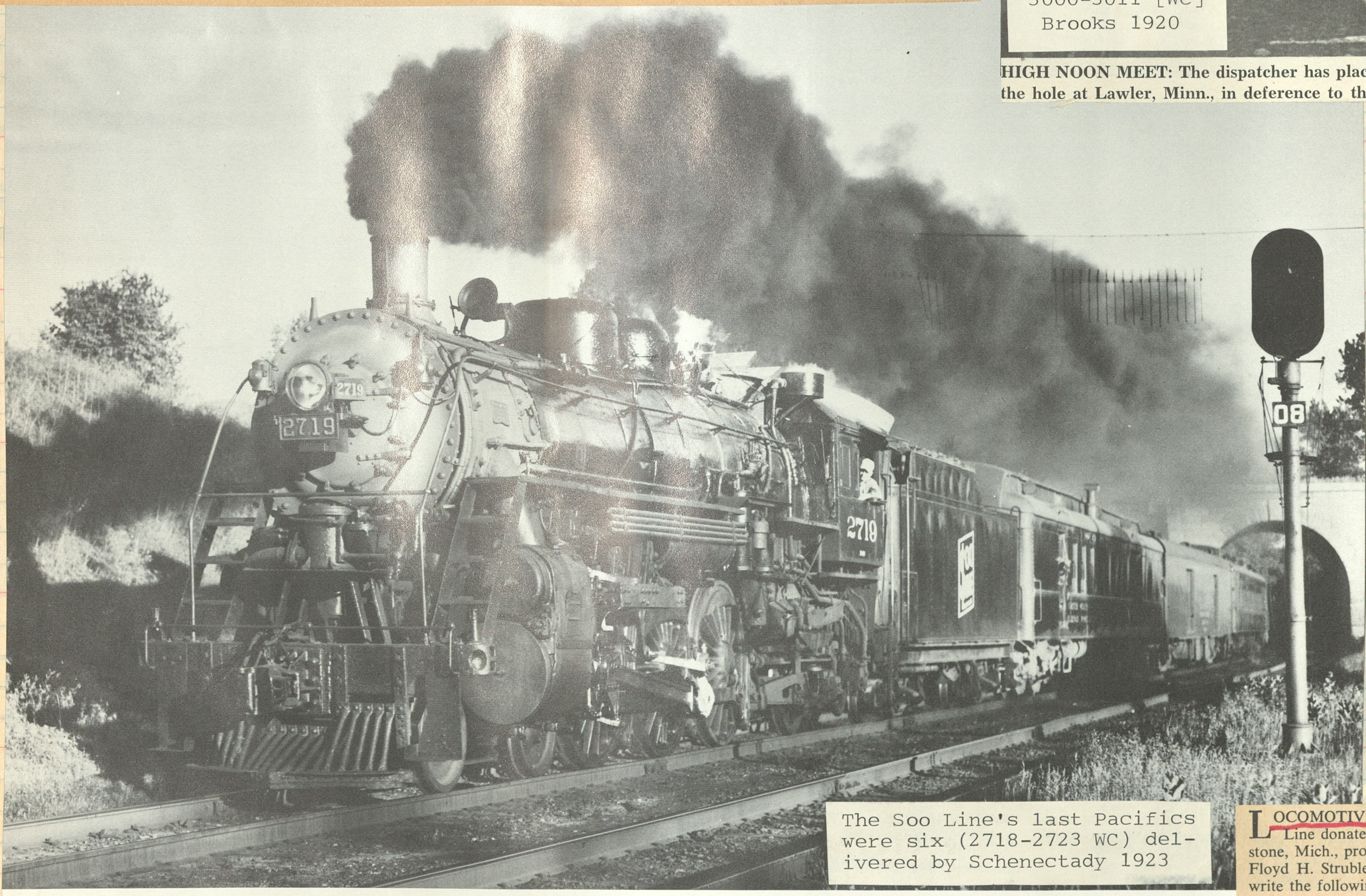
Rhode Island 1884 c/n 1879

Back in the Days When the Soo Line Was the Minneapolis, Sault Ste. Marie & Atlantic, Dan Willard, Now the President of the Baltimore & Ohio, Was an Engineer on That Line. This Rare Old Photo, Taken Just West of Weyerhaeuser, Wis., About 40 Years Ago, Shows Him Behind the Throttle of Engine No. 2



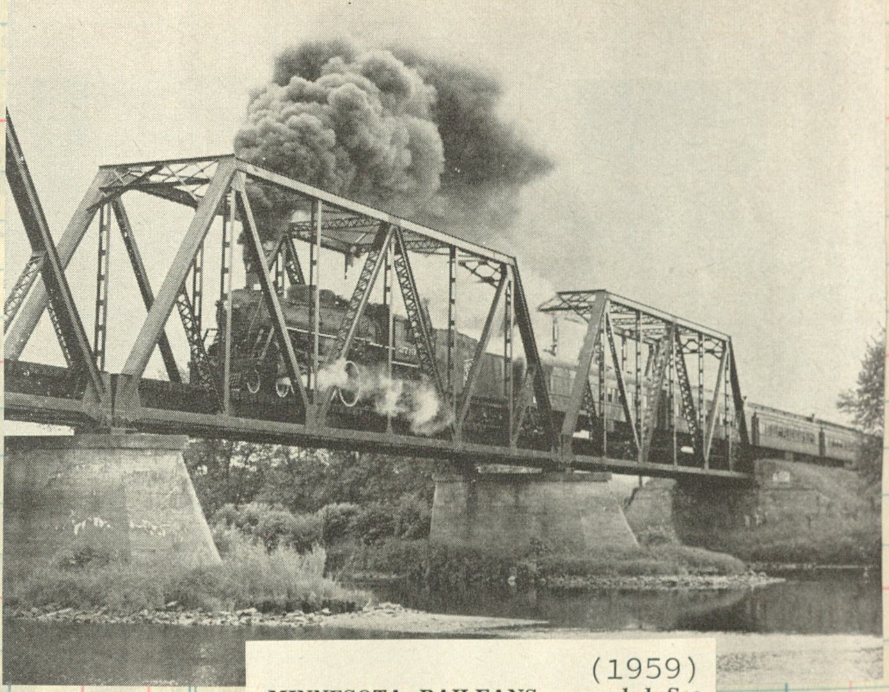
3000-3011 [WC]
Brooks 1920

**HIGH NOON MEET:** The dispatcher has placed the Pacific, wooden coach and head-end car of local No. 65 in the hole at Lawler, Minn., in deference to the weight tied up in the 125-car ore extra handled by Mike 3006.



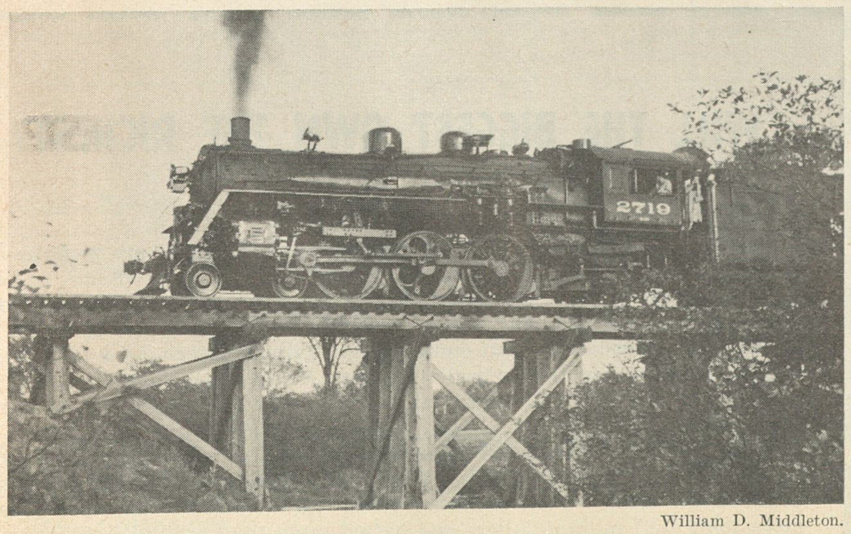
The Soo Line's last Pacifics
were six (2718-2723 WC) delivered by Schenectady 1923

*Soo Line 4-6-2 2719 hastens into St. Paul at 8:35AM with Train 7 after a night run from Sault Ste. Marie, Mich., July 6, 1953.*



(1959)

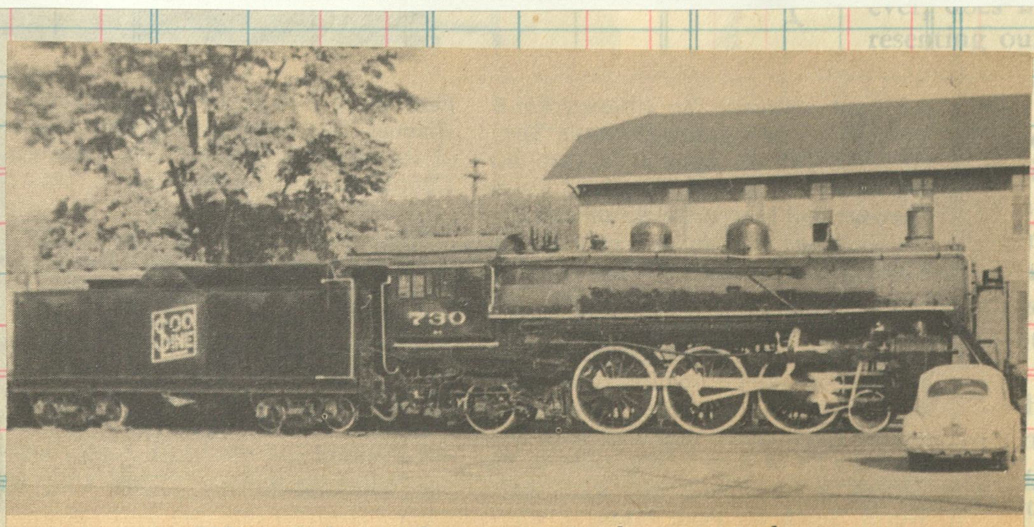
**MINNESOTA RAILFANS** persuaded Soo Line to fire up Pacific 2719 June 21 for a Minneapolis-Ladysmith (Wis.) round-trip excursion. East of Bruce, Wis., the 4-6-2 brings 10 cars across Chippewa River during movie run to mark end of Soo's steam.



William D. Middleton.

**NORMALLY** dieselized Soo Line fired up Pacific 2719 September 28 to propel a 10-car Minnesota Railfans' Association special carrying 526 from Minneapolis to Ridgeland, Wis., and return. It may well have been Soo's last steam run.

1958



Soo Line engine 730 inspired an ex-fireman to write the poem on the next page.

LOCOMOTIVE 730, which the Soo Line donated to the town of Gladstone, Mich., prompted onetime fireman Floyd H. Struble, Brampton, Mich., to write the following poem:

### MEMORIES OF THE 730

Here she sits beside the highway,
  Finished now, this outworn rover
Children clamber on her pilot;
  Railfans stop and look her over.

Firebox door is welded open,
  Water glass and gage cocks missing,
Both injectors closed forever,
  Air brake valves no longer hissing.

Stories she could tell of courage
  Oldtime hoggers' deeds of daring,
Strings of coaches brightly lighted,
  Hotbox troubles, torches flaring,

Eyes of wildlife among shadows
  In the headlight softly gleaming,
Side rods flashing, whistle wailing,
  Passengers asleep and dreaming,

Single track and close dispatching,
  Time on meets shaved very thin,
Forest fires and floods and blizzards,
  How they rapped her, wheeled her in,

Hoboes riding on the tender,
  Switchlights glinting green and red,
Railroad bulls with badge and night stick,
  Townfolk hours ago in bed.

Now she sits beside the highway,
  Done with valve oil, coal, and grease;
Symbol of the march of progress.
  Rest, old lady, rest in peace.

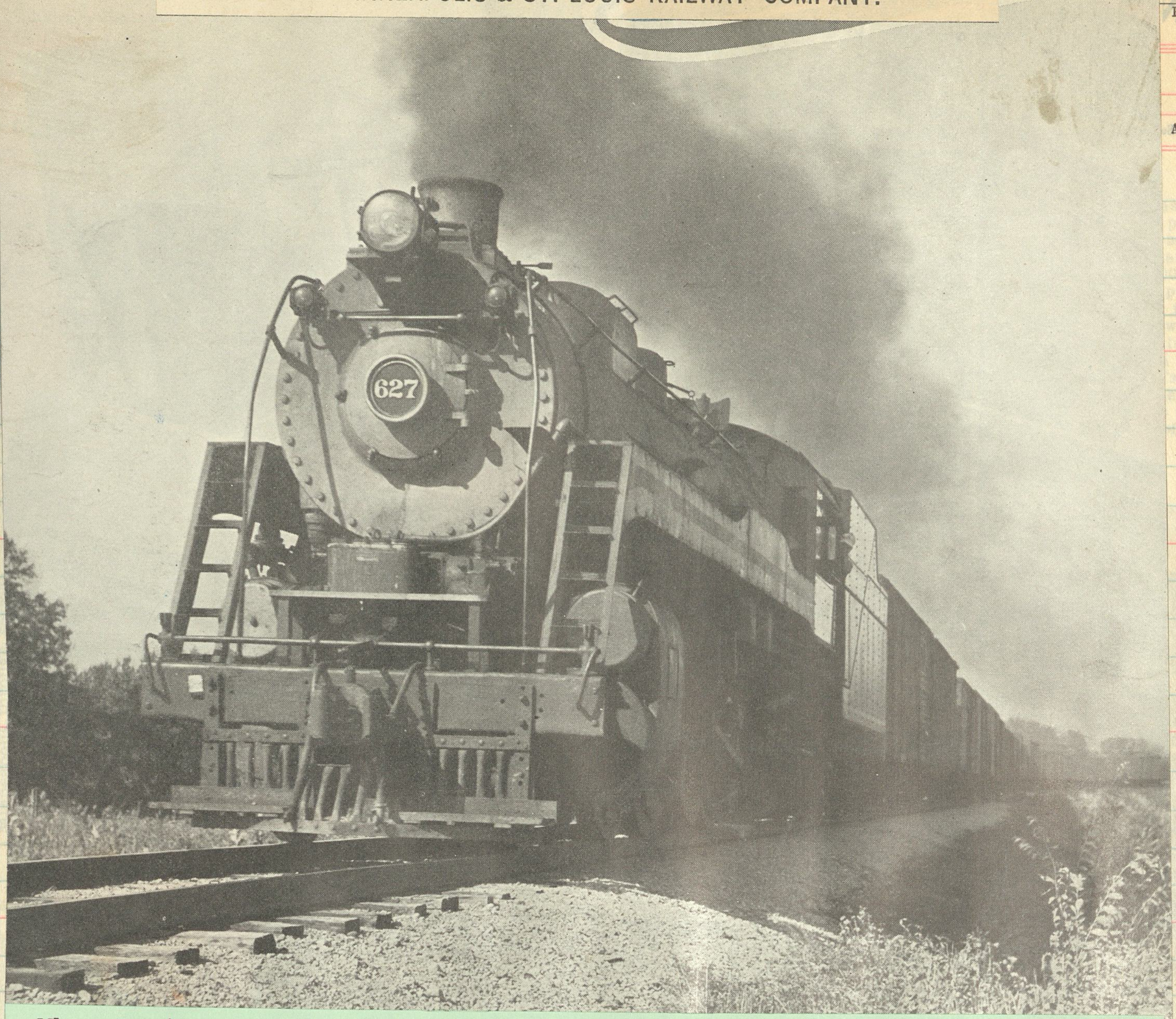
1000 bks. (Eureka 461)
Printed in U. S. A.
CUT HERE
To Make
Short Sheet

THE MINNEAPOLIS & ST. LOUIS RAILWAY COMPANY.

BACK in the early 1930's the pallbearers came to take away the Minneapolis & St. Louis, the granger road that had been ill with the bankruptcy since 1923. It wasn't even going to be a decent funeral; the plan was to bury a third of the old road and divide the remainder among eight of the M&StL's railroad neighbors. The Reconstruction Finance Corporation said it was the best way out, the experts agreed, and the farmers — well, the farmers wondered if miracles still happened.

It turned out that they did. One Lucian Sprague, perhaps best known as the man who conquered the 3-foot-gauge grades of the Uintah with articulateds, took the throttle in 1935 and straightway proceeded to give the doubters new doubts. He sold old equipment as scrap, bought new box cars, laid down good rock ballast, encouraged on-line plants, rebuilt M&StL's distinguished Mikes, and purchased diesels.

By 1942 the experts had retired and Mr. Sprague was president — not receiver — of a solvent, serving M&StL. He still is.

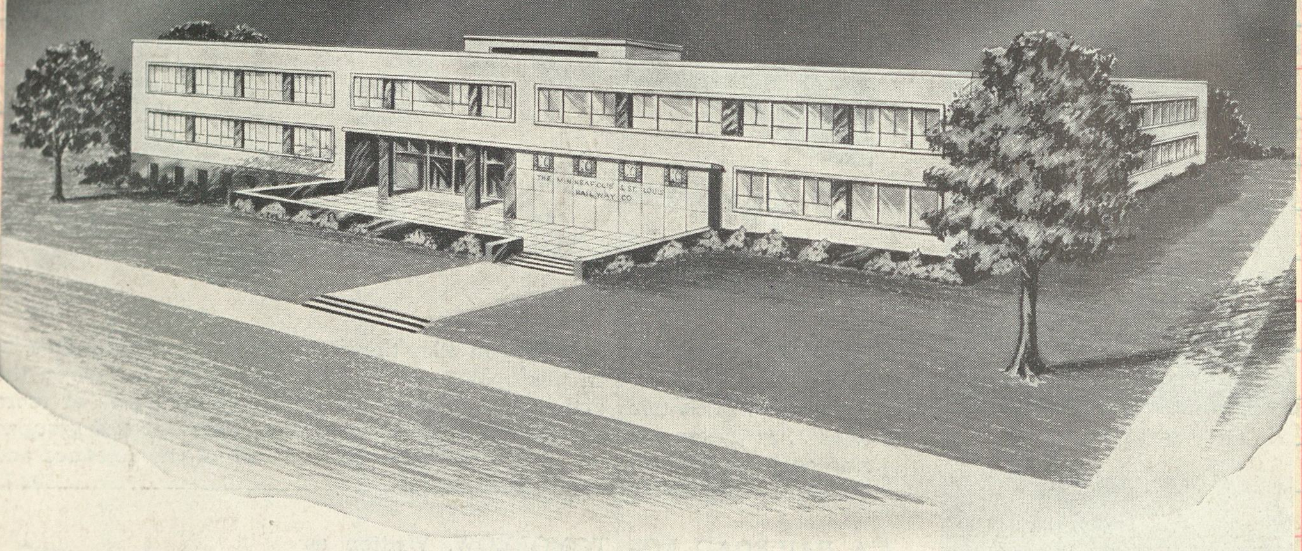


When Lucian Sprague assumed control of the M&StL the backbone of the freight power roster was thirty five light Mikados. These he sent to the shops for repairs and updating and were instrumental in pulling the road back from financial ruin. Here one of them is whipping along with a train of high cars on the way to recovery.

THE MINNEAPOLIS & ST. LOUIS RAILWAY CO.
THE PEORIA GATEWAY

In 1927 operated 1,638 miles with 218 engines, 7,402 freight and 127 pass cars.

## *New Home of*
## The M. & St. L. Railway

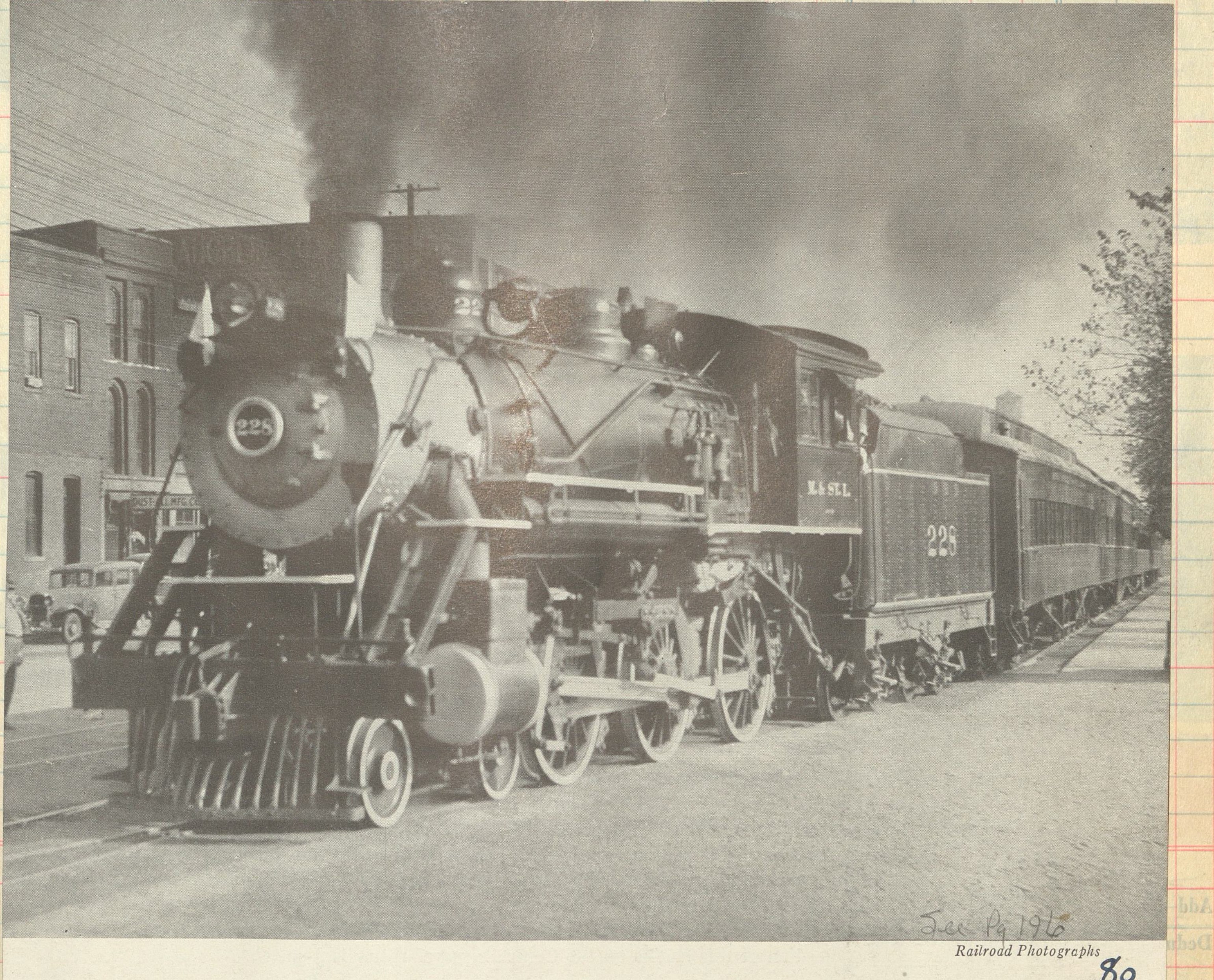


This is the new General Office Building of the Minneapolis & St. Louis Railway, as it will look when completed in early 1951 on Franklin Avenue between Stevens and First Avenues South in Minneapolis, near the edge of the downtown business district. Construction was begun April 4.

To cost nearly $1,000,000, the project climaxes an improvement program on which the M. & St. L. has spent more than $50,000,000 since the present management, headed by President Lucian C. Sprague, assumed charge in 1935.

The new headquarters building, attractive in appearance but modern and utilitarian in design and equipment, will comprise two stories and basement. It will be U-shaped, with frontage of 201 feet on Franklin Avenue, 181 on First Avenue and 161 on Stevens. Foundation and walls will be built to carry additional floors when needed. Floor space will total some 80,000 square feet and nearly 300 M. & St. L. officials and employes will occupy the various offices.

Walls will be faced with red Minnesota granite and cream-colored brick. A raised terrace will extend 75 feet along the front. Materials and equipment produced in Minnesota will be used extensively. An escalator will run from the first to the second floors and an auto park for employes will occupy the rear of the site. Clyde W. Smith of Minneapolis is the architect and the James Leck Company of Minneapolis is the general contractor.



See Pg 196

Railroad Photographs

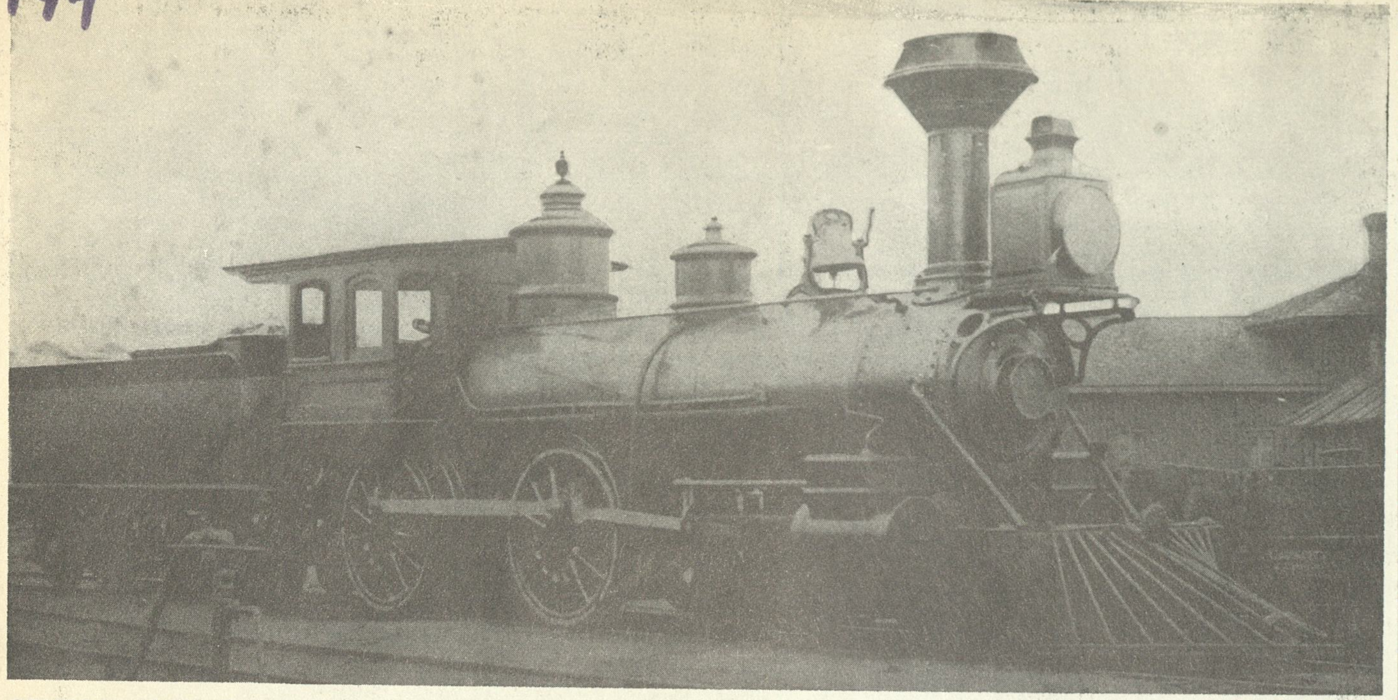
80

CARRYING WHITE ON THE M. & ST. L.

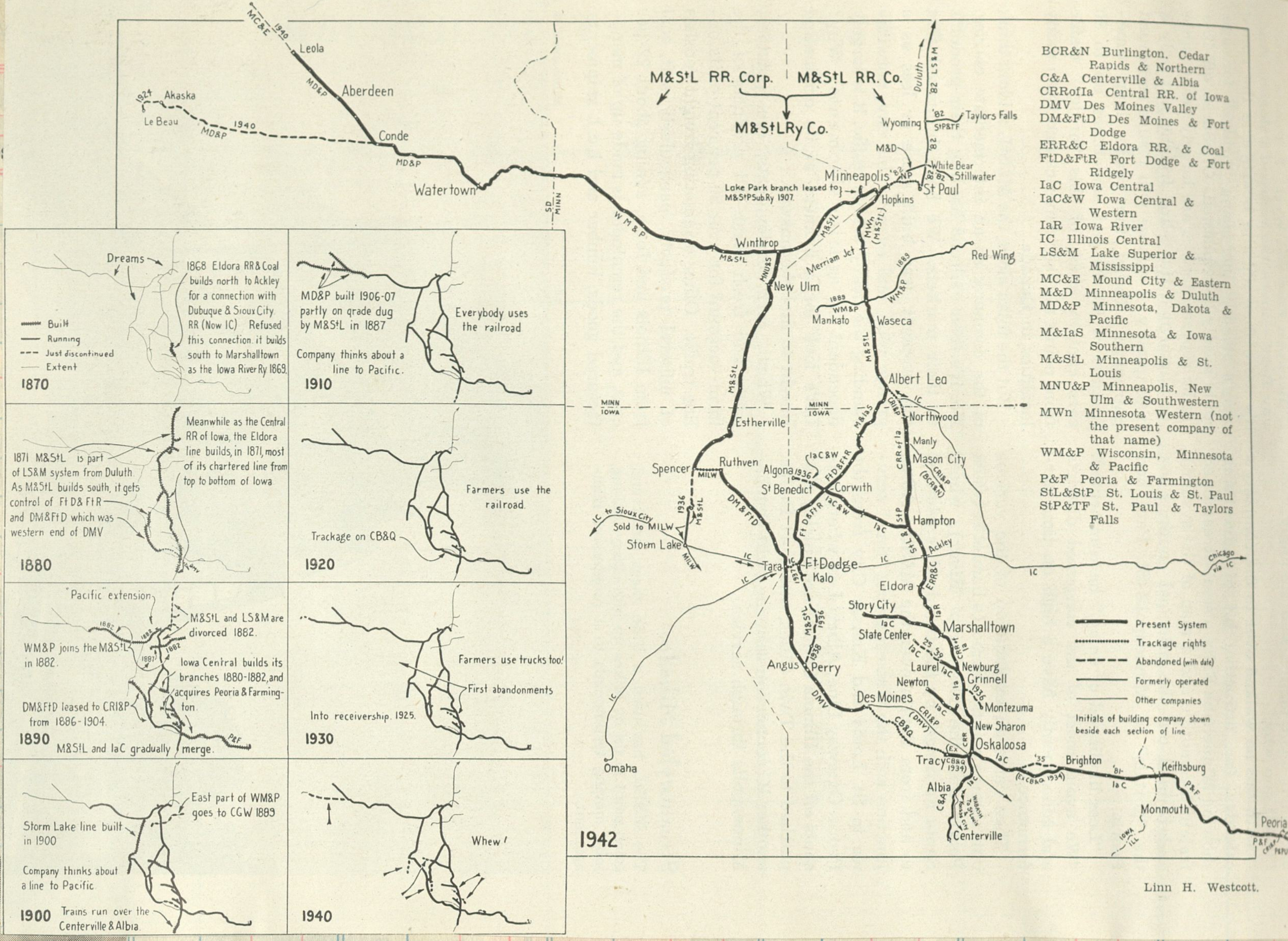
This heavy-duty Minneapolis and St. Louis 4-6-0, specially spruced up for the occasion and carrying the white flags of a special above its smokebox is on the head of an American Legion train rolling through the city center of Peoria, Illinois. The M. & St. L. is primarily a freight road but it has unearthed some old-time wooden coaches for the occasion which probably pleased the boys, off on a convention junket, just as much as modern streamlined equipment would have.

BALDWIN
1909

194



**CENTRAL IOWA RAILWAY** expanded its trackage by the acquisition of a number of short lines in the Buckeye State. The New Sharon, Coal Valley & Eastern Railway, incorporated in 1880, passed to the Chicago, Burlington & Pacific Railroad in January of 1882 and was purchased by the Central Iowa in April, 1882, giving the road a connection from Oskaloosa to a point on the Mississippi River opposite Keithsburg Illinois. Another short branch acquired from the Chicago, Burlington & Pacific extended from Newton to New Sharon, Iowa. The branch to Montzeuma, built by the Grinnel & Montezuma Railway, was gathered up by the Keithburg, Grinnell & Dakota Railway; this latter concern built a line from Newburg to State Center, Iowa, and both branches became Central Iowa properties in 1882. Added in the same year was the Iowa Central & Northwestern Railway's line from Minerva Junction to Story City. Sub-standard wages, coupled with poor track and rough operating conditions, made the Hook & Eye a boomer's pike, the proverbial "last chance" of those roaming railroaders who could not find employment on other roads. The labor turnover was fantastic, yet the boomers and a handful of homeguards maintained some tight schedules on the road in spite of hilly terrain light iron, dirt ballast and sharp curve. Typical motive power was represented by the Central's Engine 48, a Manchester 4-4-0 built in 1882 under Shop No. 1077. Renumbered Iowa Central 124, she later became the M&StL 154, Class D-8. The Central Iowa was favored by the Quakers for their annual Meeting treks to Oskaloosa. (Collection of Dr. S. R. Wood)

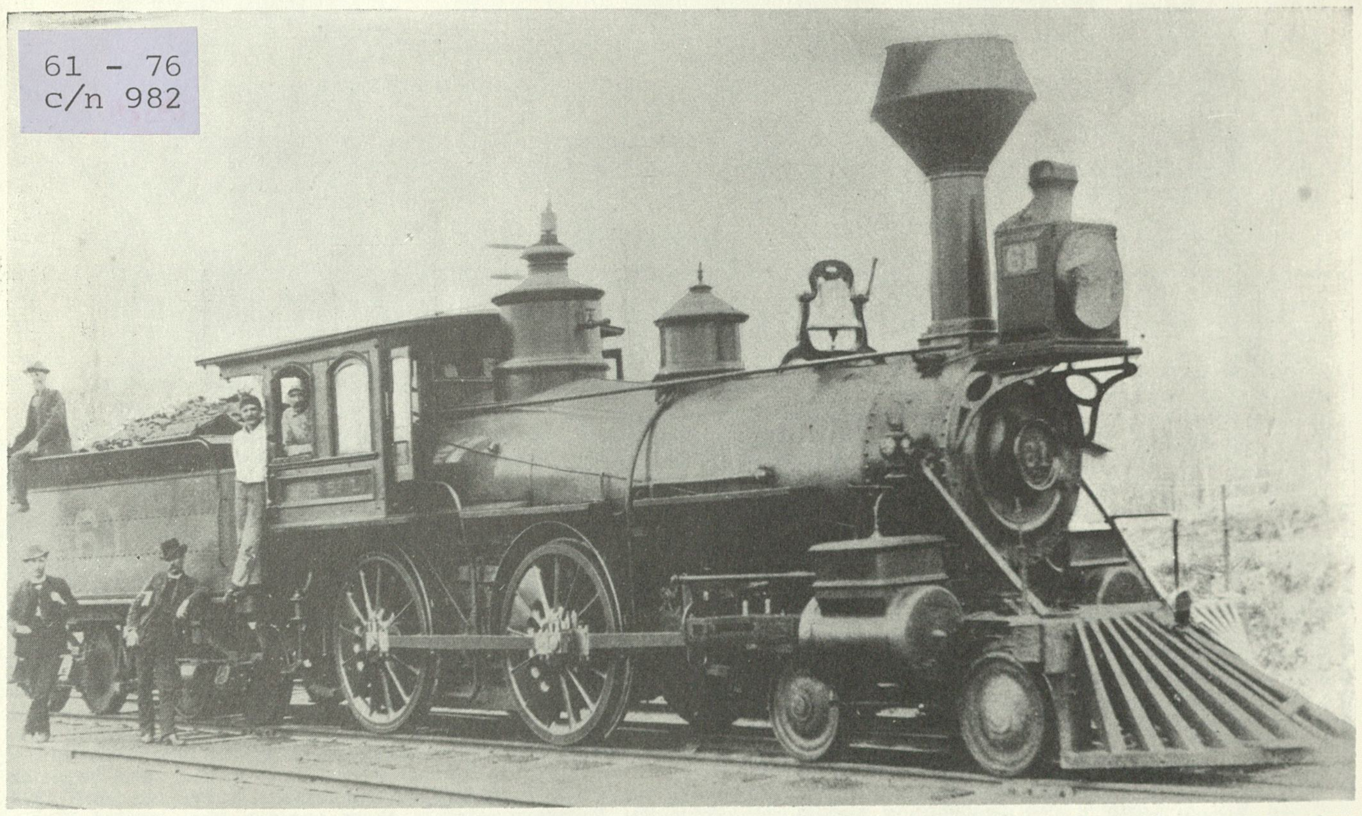

Leola
Aberdeen
Akaska
Le Beau
Conde
Watertown
MD&P
1924
1940
M&StL RR. Corp.
M&StL RR. Co.
M&StLRy Co.
Duluth
Wyoming
Taylors Falls
M&D
White Bear
Stillwater
Minneapolis
St Paul
Hopkins
Lake Park branch leased to M&StP Sub.Ry. 1907
Winthrop
Merriam Jct
Red Wing
New Ulm
Mankato
Waseca
Albert Lea
Northwood
Manly
Mason City
Estherville
Spencer
Ruthven
Algona
St Benedict
Corwith
Hampton
Storm Lake
Ft Dodge
Tara
Kalo
Eldora
Story City
Marshalltown
State Center
Angus
Perry
Laurel
Newburg
Grinnell
Newton
Des Moines
Montezuma
New Sharon
Oskaloosa
Tracy
Brighton
Keithsburg
Albia
Monmouth
Centerville
Peoria
Omaha
IC to Sioux City
Sold to MILW
Chicago via IC
MINN
IOWA
SD
MINN
BCR&N Burlington. Cedar Rapids & Northern
C&A Centerville & Albia
CRRofIa Central RR. of Iowa
DMV Des Moines Valley
DM&FtD Des Moines & Fort Dodge
ERR&C Eldora RR. & Coal
FtD&FtR Fort Dodge & Fort Ridgely
IaC Iowa Central
IaC&W Iowa Central & Western
IaR Iowa River
IC Illinois Central
LS&M Lake Superior & Mississippi
MC&E Mound City & Eastern
M&D Minneapolis & Duluth
MD&P Minnesota, Dakota & Pacific
M&IaS Minnesota & Iowa Southern
M&StL Minneapolis & St. Louis
MNU&P Minneapolis, New Ulm & Southwestern
MWn Minnesota Western (not the present company of that name)
WM&P Wisconsin, Minnesota & Pacific
P&F Peoria & Farmington
StL&StP St. Louis & St. Paul
StP&TF St. Paul & Taylors Falls
Present System
Trackage rights
Abandoned (with date)
Formerly operated
Other companies
Initials of building company shown beside each section of line
1942
Built
Running
Just discontinued
Extent
Dreams
1868 Eldora RR & Coal builds north to Ackley for a connection with Dubuque & Sioux City RR (Now IC) Refused this connection. it builds south to Marshalltown as the Iowa River Ry 1869.
1870
MD&P built 1906-07 partly on grade dug by M&StL in 1887
Company thinks about a line to Pacific.
Everybody uses the railroad
1910
1871 M&StL is part of LS&M system from Duluth. As M&StL builds south, it gets control of Ft D& Ft R and DM&FtD which was western end of DMV
Meanwhile as the Central RR of Iowa, the Eldora line builds, in 1871, most of its chartered line from top to bottom of Iowa
1880
Farmers use the railroad.
Trackage on CB&Q
1920
"Pacific" extension
M&StL and LS&M are divorced 1882.
WM&P joins the M&StL in 1882.
Iowa Central builds its branches 1880-1882, and acquires Peoria & Farmington.
DM&FtD leased to CRI&P from 1886-1904.
M&StL and IaC gradually merge.
1890
Farmers use trucks too!
First abandonments
Into receivership. 1925.
1930
East part of WM&P goes to CGW 1889
Storm Lake line built in 1900
Company thinks about a line to Pacific
Trains run over the Centerville & Albia.
1900
Whew!
1940
Linn H. Westcott.

Echoing down the trail of long ago is Iowa Central No. 57, pausing briefly at Story City, Iowa, while crew and passengers watch the "birdie."

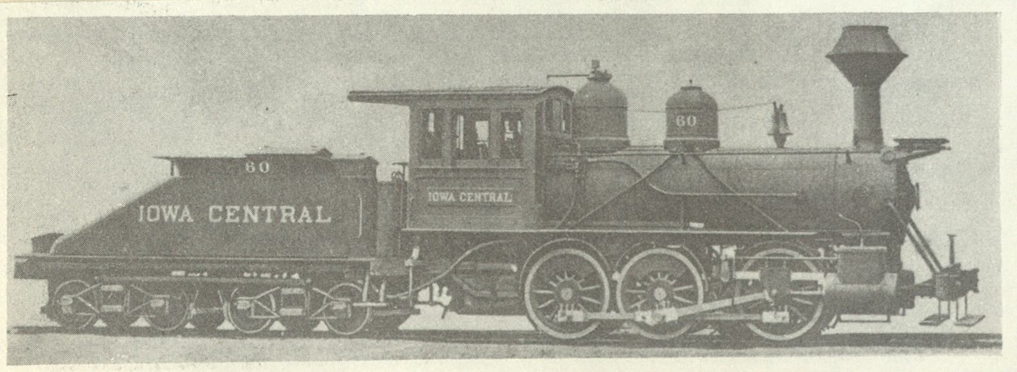
Nos 53-58 Cooke 1887

#57 c/n 1627, renoed 131, to M&StL #172

61 - 76
c/n 982

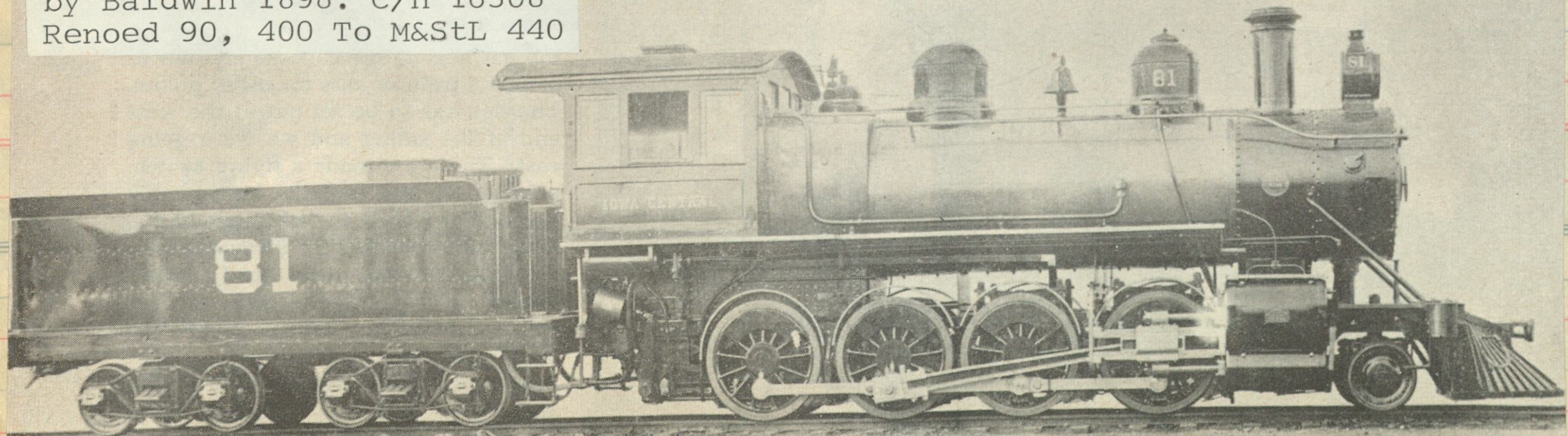


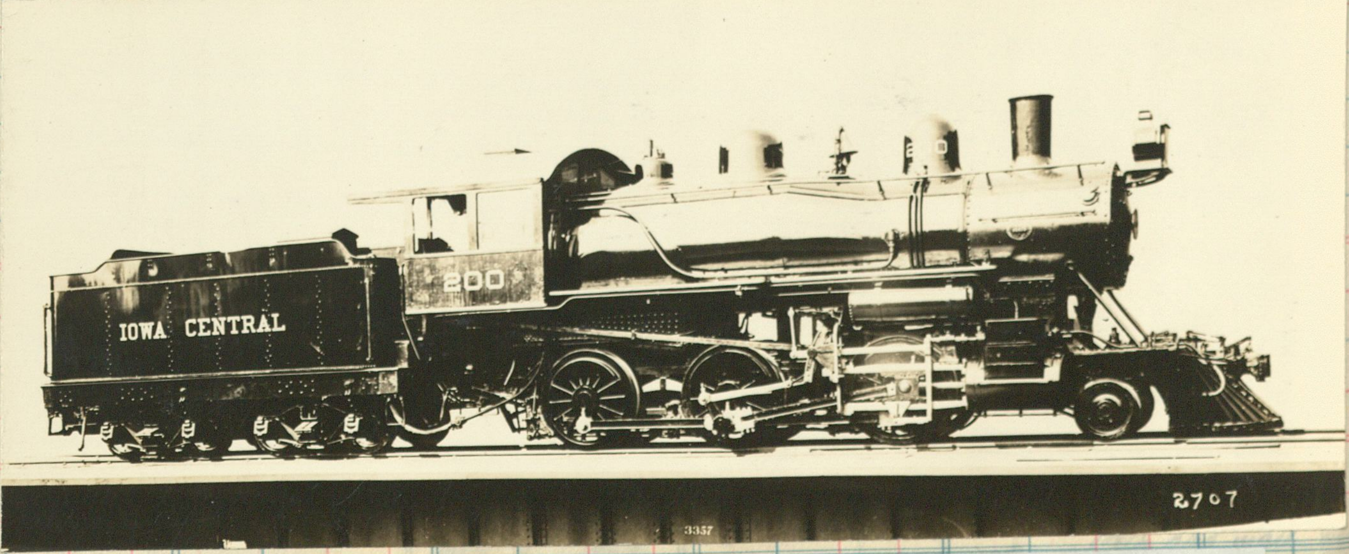
**"MISERY & SHORT LIFE"** was the nickname hung on the Minneapolis & St. Louis by the old-time boomer railroaders that roamed the West. The line acquired the Fort Dodge & Fort Ridgeley Railroad built in the late 1870's, and by means of an extension southwest from Albert Lea, Minnesota, and absorption of the subsidiary Minnesota & Iowa Southern, the M&StL was soon running trains to Fort Dodge, Iowa. By January of 1882, the line had built on south to Angus, heart of a rich coal producing area. The year 1882 also saw the road extended via Winthrop to Morton, Minnesota, on a new westward extension around the southern edge of Lake Minnetonka. Under a paper-work company called the Wisconsin, Minnesota & Pacific Railway, the network of rails was extended west from Morton to Watertown, South Dakota, a distance of 122 miles; this branch was completed in 1884. For a time the M&StL operated the Cannon Valley line, the old Minnesota Central road from Red Wing to Mankato, via Northfield and Waterville. The extension west past Lake Minnetonka brought a flood of passenger traffic to the resort area, and a regular shuttle train ran between Minneapolis and Excelsior; Engine 7, a small 4-4-0, handled this run and her engineer, Billy Watson, carried his pet Scotch terrier on the seatbox with him as they hustled pleasure-seekers, tourists, boating enthusiasts, fishermen, and vacationers to the lovely lake. Engine 61, built by Manchester in 1881, was typical of the main line locomotives in use on the M&StL at the time; she later was No. 123.


60
IOWA CENTRAL
IOWA CENTRAL
60

In 1889 Cooke delivered two 0-6-0's noed 60 & 61 Renoed 5 & 6, 51 & 52, then M&StL 46 &47

#81, a compound 2-8-0 built by Baldwin 1898. C/n 16308 Renoed 90, 400 To M&StL 440




IOWA CENTRAL
200
2707

Mogul 200, initial engine of six delivered by Baldwin in 1908. c/n 32873 Renoed 306, then M&StL #329

195

Railway Age
June 8, 1940

The M. & St. L. Is Now a Modern, Well-Built Railroad

**OFFICERS**

L. C. Sprague,
*President*

H. W. WARD,
*Vice-President - Traffic*

J. W. DEVINS,
*Vice-President General Manager*

C. W. WRIGHT,
*Vice-President - General Counsel*

G. A. ANDERSON,
*Comptroller*

M. E. EATON,
*Secretary*

W. C. KNOBLE, *Treasurer*

# The "Doctors" Were Wrong

## Minneapolis & St. Louis, pronounced hopeless by experts, gives evidence of vigorous life

ON December 31, 1934, the Minneapolis & St. Louis was in apparently hopeless shape, financially and physically. This 1,500-mile line had been pronounced to be in a dying condition by several transportation authorities and was about to be partitioned among various other lines in the same territory.

If ever a railroad presented a dismal outlook for the future, it was the M. & St. L. on December 31, 1934. On that date, cash on hand in banks amounted to $103,504. Vouchers on hand awaiting payment amounted to $217,641, while $1,185,000 in receiver's certificates were outstanding. The physical condition of the property and the rolling stock matched its extremely weak financial condition.

After five years an entirely different picture presents itself. On November 14, 1939, for example, cash on hand in banks in excess of outstanding paper amounted to $757,424. Vouchers on hand awaiting payment were only $53,848 and the balance of receiver's certificates outstanding were all paid off late in November, 1939, this latter item alone accounting for more than a million dollars betterment in the railway's financial condition. Meanwhile, in the five years, 13 million dollars had been expended on the property, *out of earnings*. Locomotives and cars were in good shape to run and the right of way was vastly improved. The general offices were moved to a modern building in the heart of town. All equipment trust obligations were being met promptly on maturity and cash discounts amounting to an average of $10,000 annually were being taken as offered on the purchase of materials and supplies. Despite a long-continued drought in the territory served by the railway, revenue loadings are up about 25,000 cars since 1935 and despite a winter in which the most severe snow and blizzard conditions in history were experienced in M. & St. L. territory, the operating ratios reflected clearly that the railway was being run efficiently.

This outstanding feat has been accomplished by a realistic approach to the pressing problems—of which there were many; by a readiness to depart from precedent, where precedent required illogical and cumbersome action in achieving a desired end; and by a willingness to spend money in places where it would bring returns.

Above all, it was accomplished by inspired leadership, backed by wholehearted teamwork. One thing the transportation experts failed to reckon with, as they analyzed the unfortunate line from a statistical viewpoint, was the human element, imponderable but extremely valuable. There was of course, among the officers and men, a

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# M. & ST. L. SOLD

1942

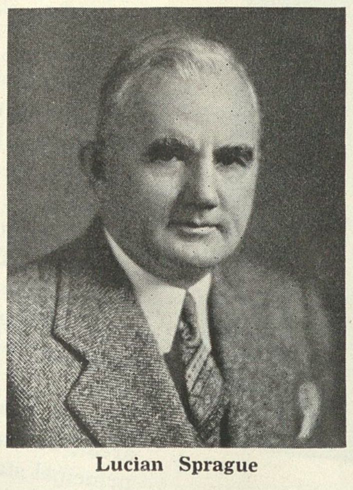
### Success of Rehabilitation Program Marks End of 19-Year-Old Receivership

1942 BY JAMES M SUTHERLAND
*Staff Writer, Minneapolis Star Journal.*

**Minneapolis, Sept. 11.**—Because a white-haired human dynamo by the name of Lucian C. Sprague has not got the word "quit" in his vocabulary, Minneapolis and the Northwest have a railroad serving them today that 10 years ago had been given up for dead. Crowning proof of that fact was the order Thursday, by Federal Judge Gunnar H. Nordbye, approving the reorganization of the Minneapolis & St. Louis railroad into a solid, well financed property with every assurance of future success.

A decade, even seven years ago, the M. & St. L. was dying. Nearly everyone, including its employees, had practically given it up as a railroad past all hope of saving.

But Sprague and his lieutenants marshaled their forces and brought the plan, during weeks of hearing, before an interstate commerce commission examiner. Most of their regular business hours were spent at those hearings, while they directed operations of their railroad during hours most business men rest and sleep.



Lucian Sprague

Now the longest receivership in railroad history—19 years—has been terminated. All that remains is the legal red tape inevitably accompanying such a task.

That the program bore fruit is attested by the road's operating statements. In the first seven months of this year, for example, the road had a receiver's net income of $1,157,537—and it wasn't so long ago when that was a red figure every month.

Sprague will tell you that this success isn't his. He will say it was the swell job done by W. W. Colpits, the New York consulting engineer who labored for years over the reorganization program, and T. W. Wright, counsel for the reorganization committee, and J. W. Devins, general manager, and H. W. Ward, general traffic manager, and G. A. Anderson, comptroller.

They all did their part, but it was Sprague, the 57-year-old former cowboy, fireman, engineer, superintendent, etc., who was the sparkplug for them all.

Any one of them—and every employee on the road—will tell you that.

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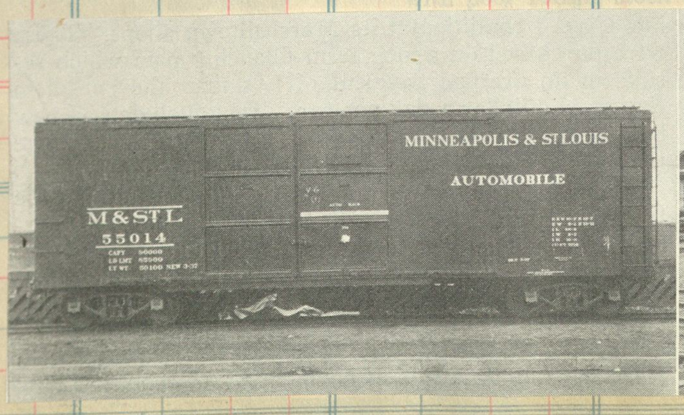

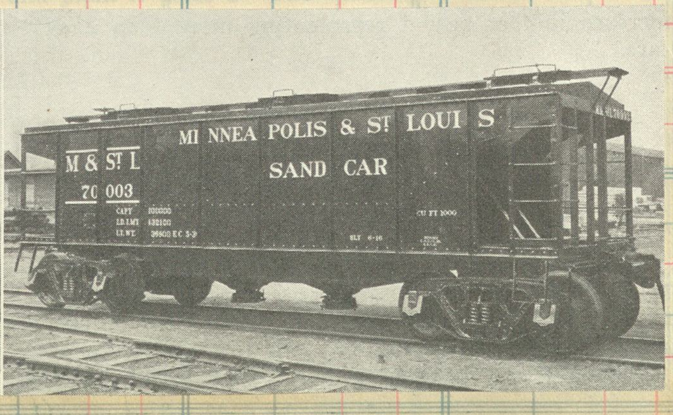

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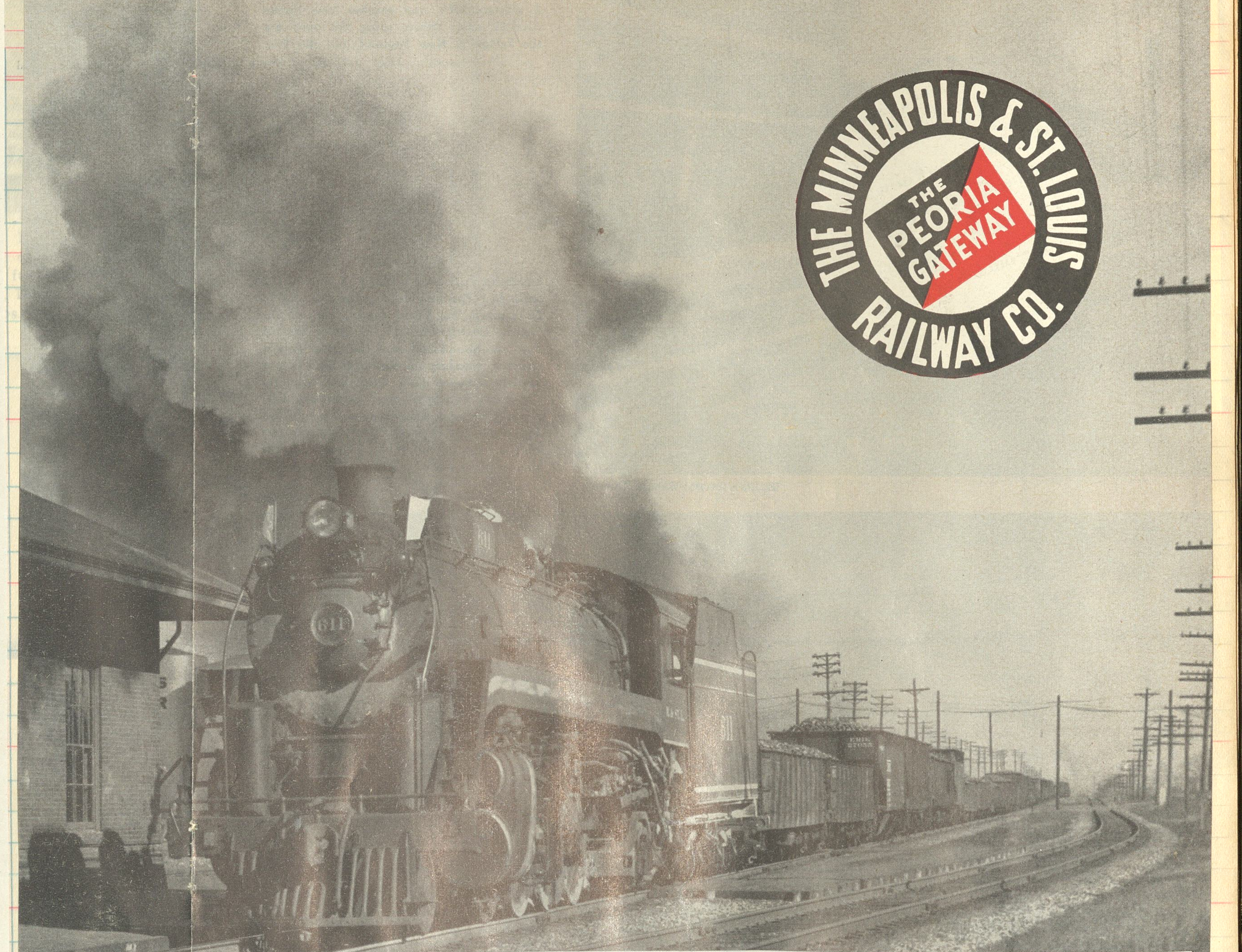
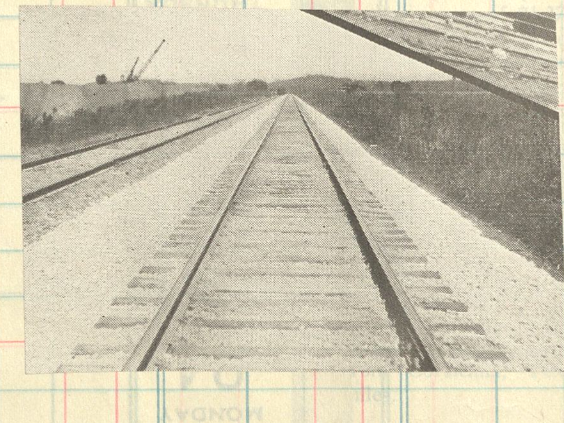
Truly indicative of the reborn spirit of the M & StL, Extra 611 storms thru Hopkins, Minn. with solid train of sugar beets.





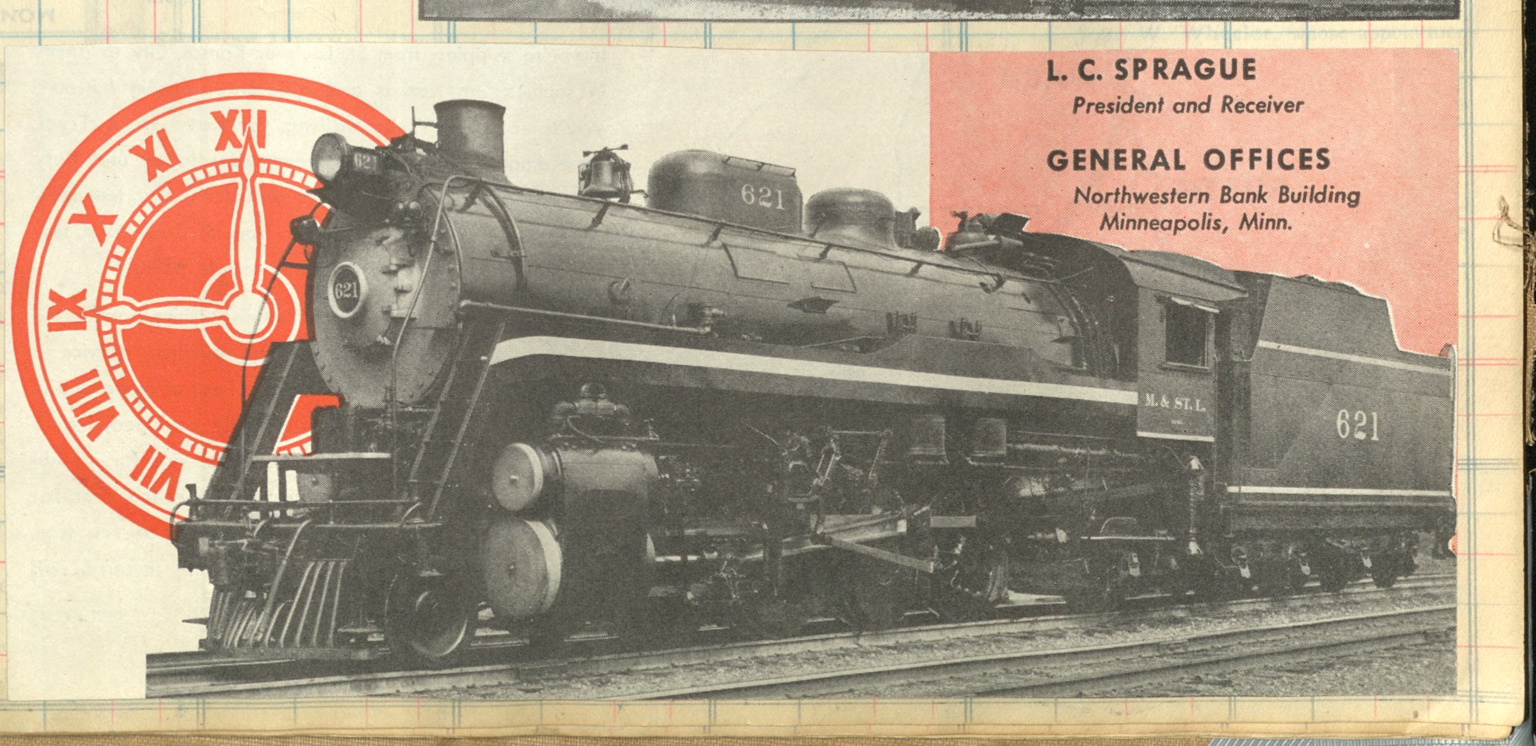
THE MINNEAPOLIS & ST. LOUIS RAILWAY CO.
THE PEORIA GATEWAY
625

**THE MINNEAPOLIS & ST. LOUIS RAILWAY**

To the many industries now on its lines in Minnesota, South Dakota, Iowa and Illinois, and to the many other industries seeking advantageous locations in the Midwest, the M & St. L. Railway offers Fast, Dependable Freight Service.

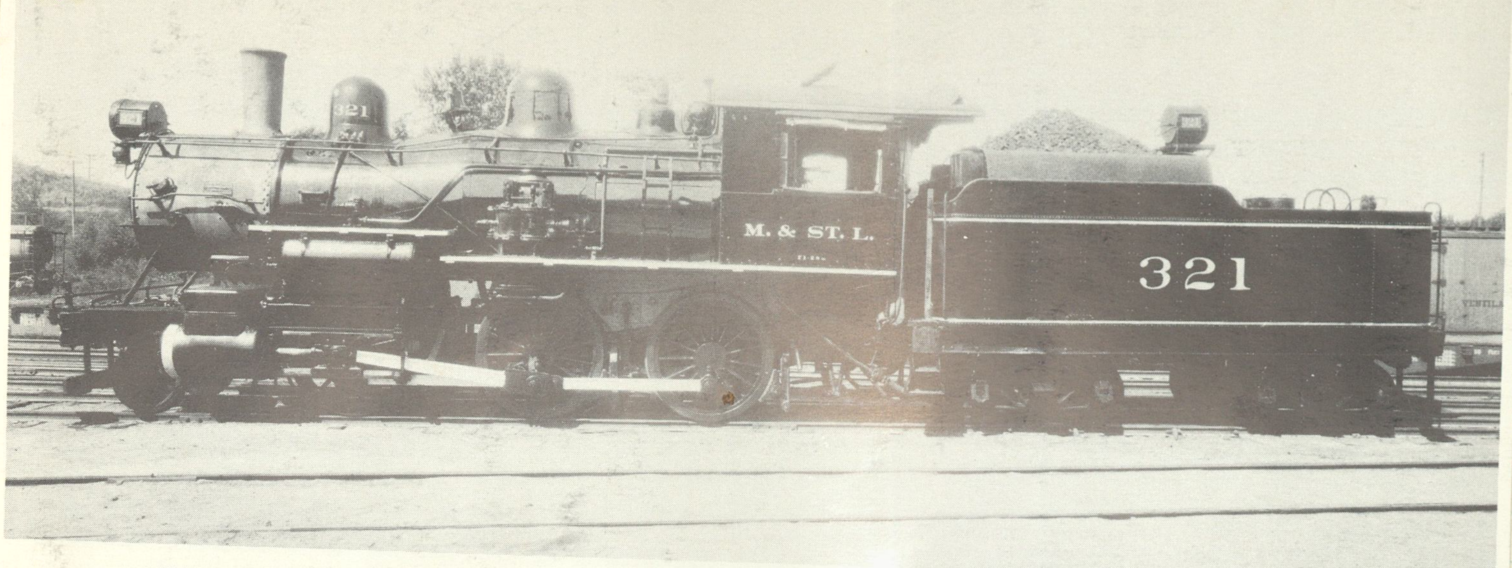
*Traffic Offices in 36 Key Cities*

General Offices:
NORTHWESTERN BANK
BUILDING
Minneapolis 2, Minn.



**L. C. SPRAGUE**
*President and Receiver*

**GENERAL OFFICES**
Northwestern Bank Building
Minneapolis, Minn.



MINNEAPOLIS & ST. LOUIS RY. NO. 321

Road class F2-33 was a Baldwin product of 1908. The No. 321 weighed 150000 pounds and developed a tractive force of 33400 pounds. With 57" drivers, the engine had cylinders measuring 20" x 28" and developed a boiler pressure of 200 lbs. The class F2-33 was equipped with Stephenson valve motion. Photo from the M & St. L. Ry.

Blt 1909
c/n 33501

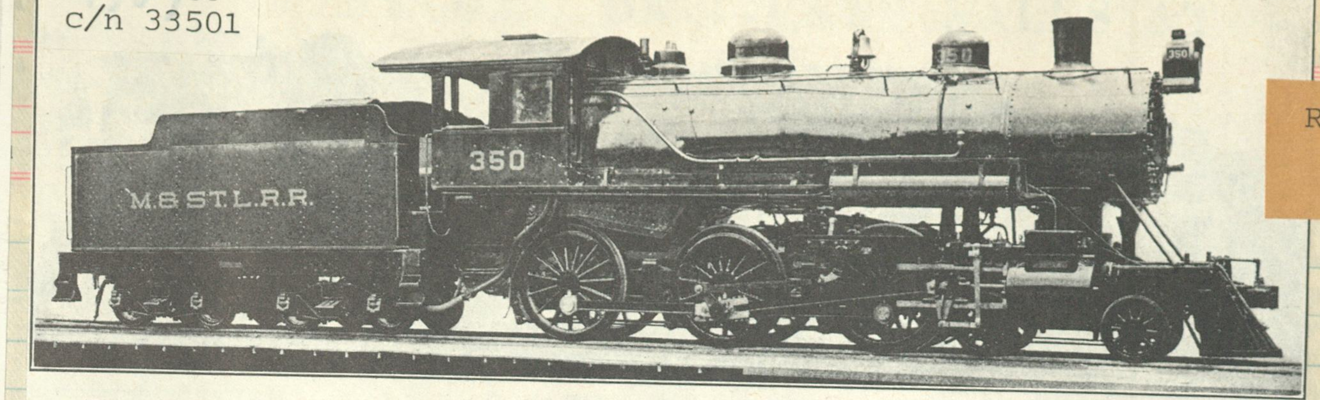
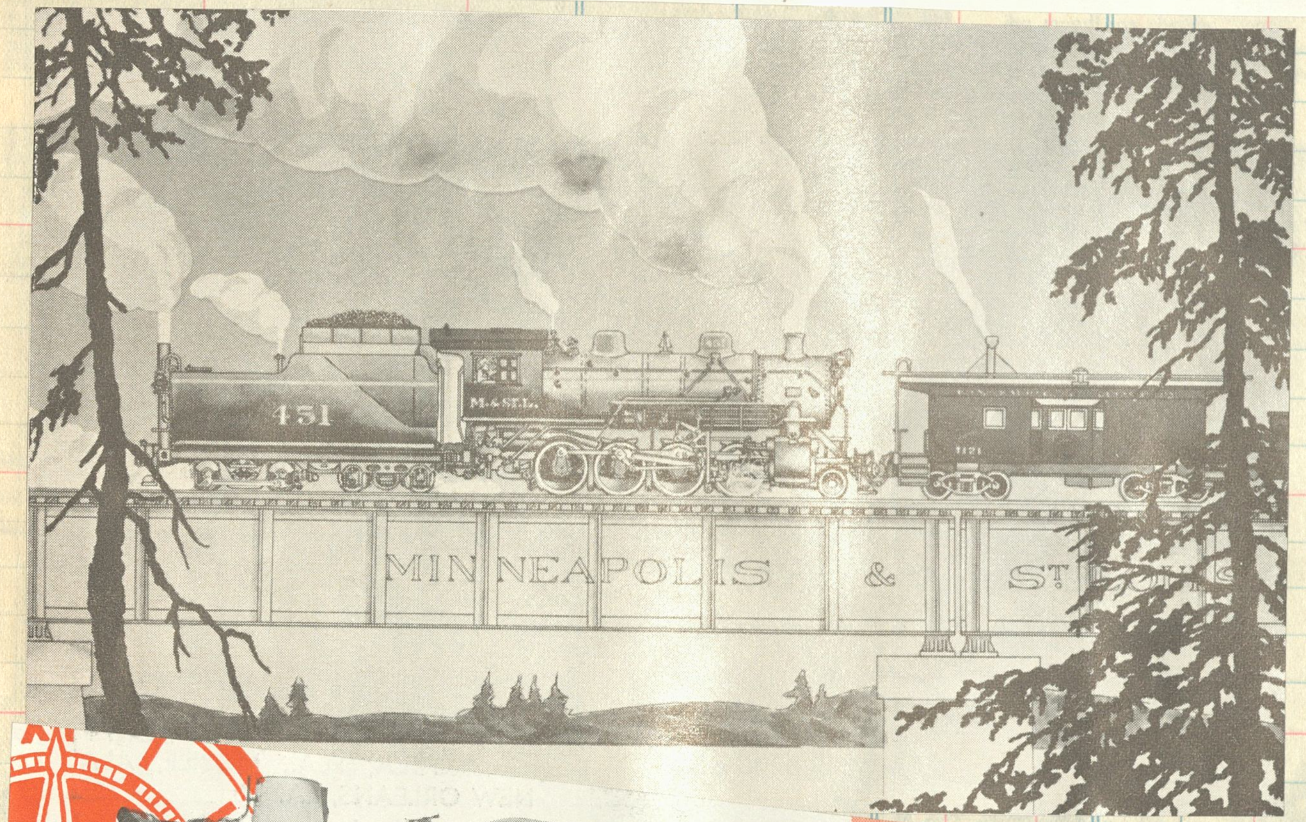
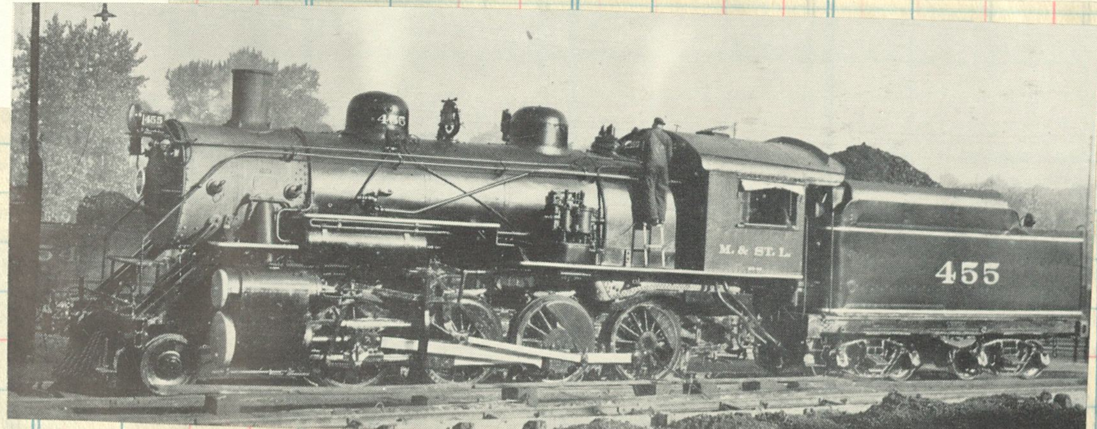
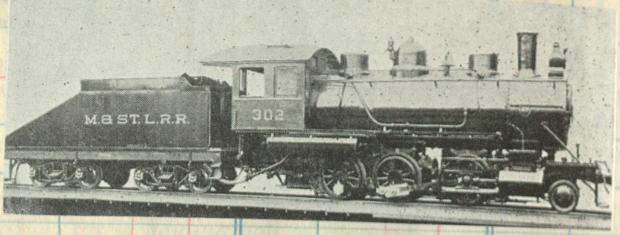


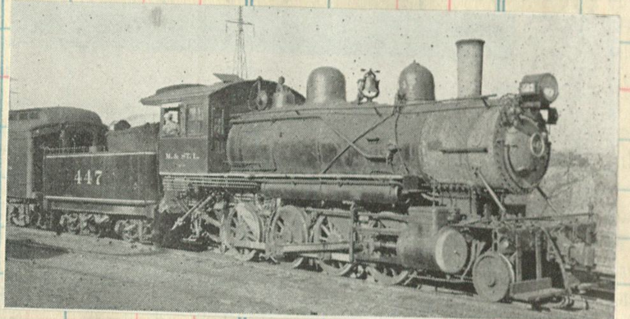
Fig. 59—Ten-Wheel (4-6-0) Locomotive for Passenger Service. Built for the Minneapolis & St. Louis by the Baldwin Locomotive Works. Cylinders, 21 in. x 26 in. Working Steam Pressure, 200 lbs. per sq. in. Diameter of Drivers, 68 in. Tractive Effort, 28,700 lbs. Heating Surface—Tubes, 2,473 sq. ft.; Water Tubes, 24 sq ft.; Firebox, 152 sq. ft.; Total, 2,649 sq. ft. Grate Area, 42.5 sq. ft. Rigid Wheel Base, 15 ft. 10 in. Total Engine Wheel Base, 26 ft. 11 in. Weight on Drivers, 132,900 lbs. Total Weight of Engine, 173,850 lbs. Fuel, Soft Coal.

Renoed
204
228

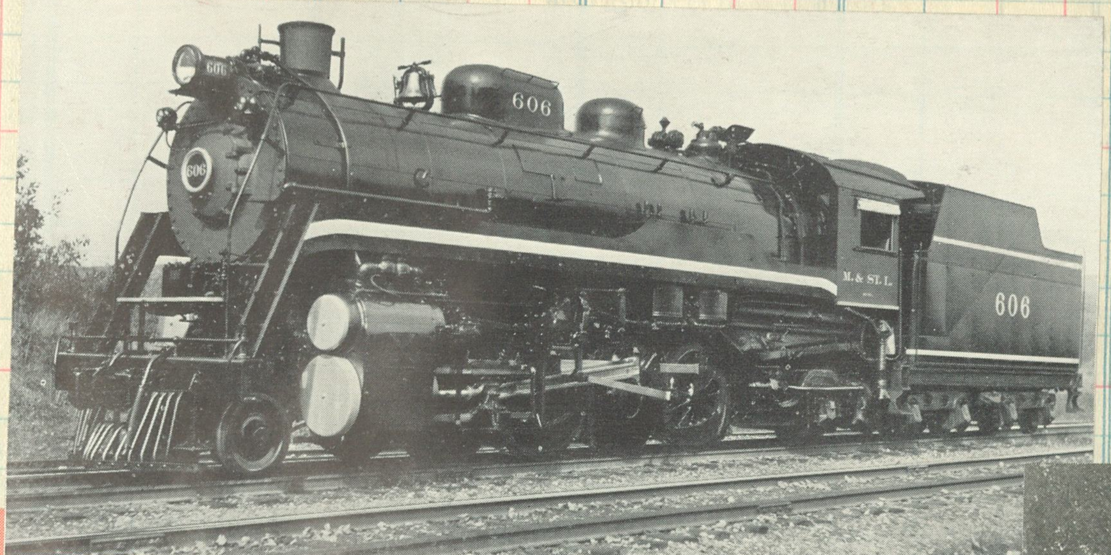

451
M.& ST.L.
MINNEAPOLIS & ST

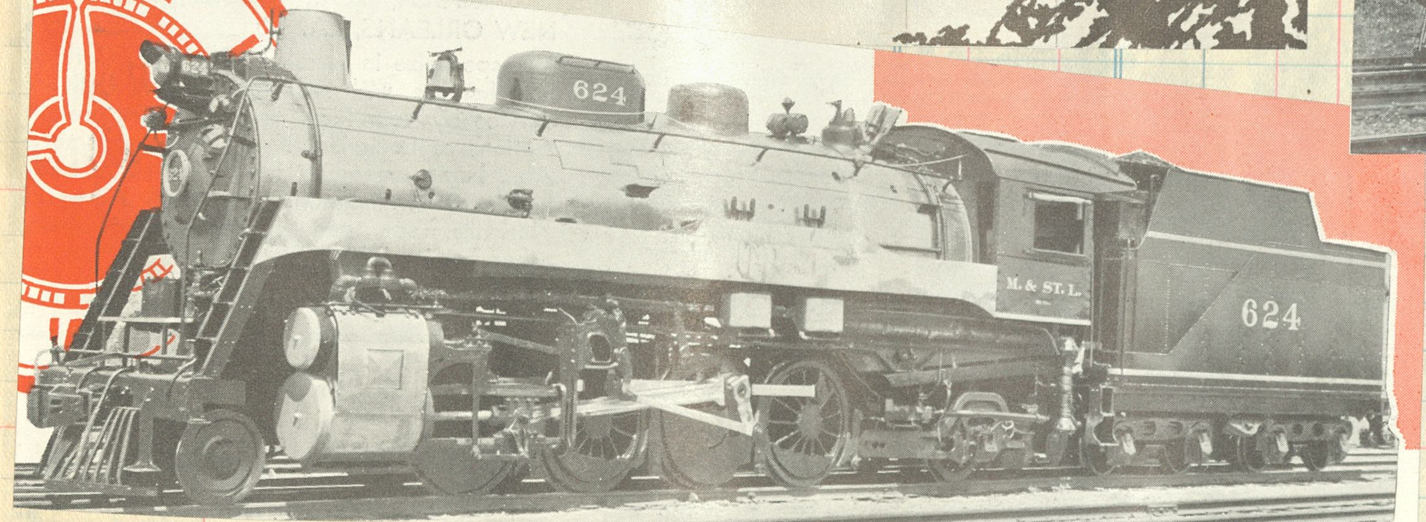


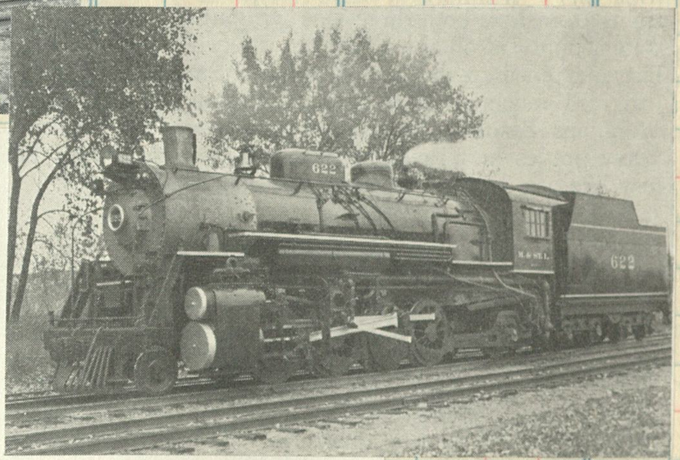


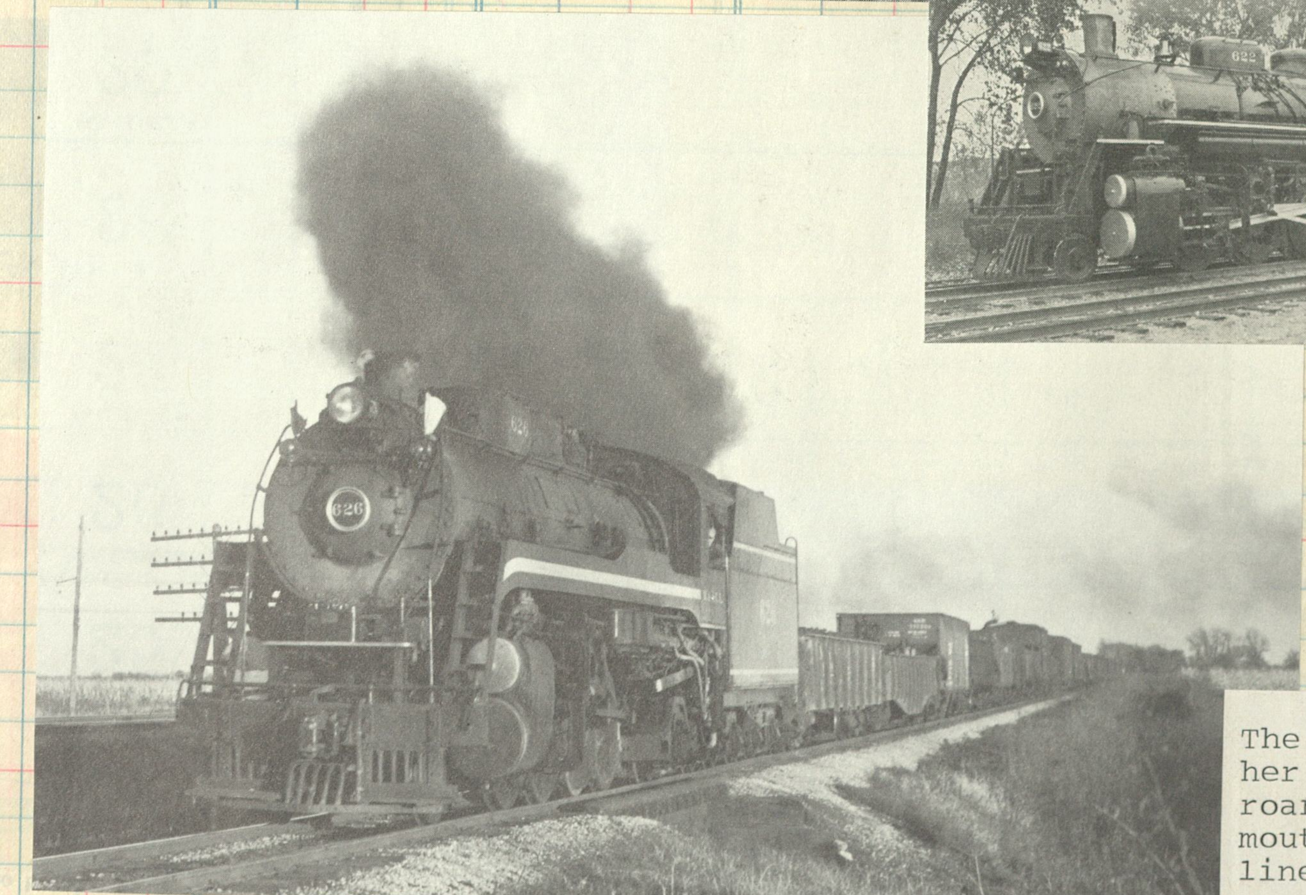


302 Org IC 83 Schen 1902
+++++++++++++
455 450-461 Schen 1912
+++++++++++++
447 Org Nos IC 97, 407
Schen 1902 c/n 26316

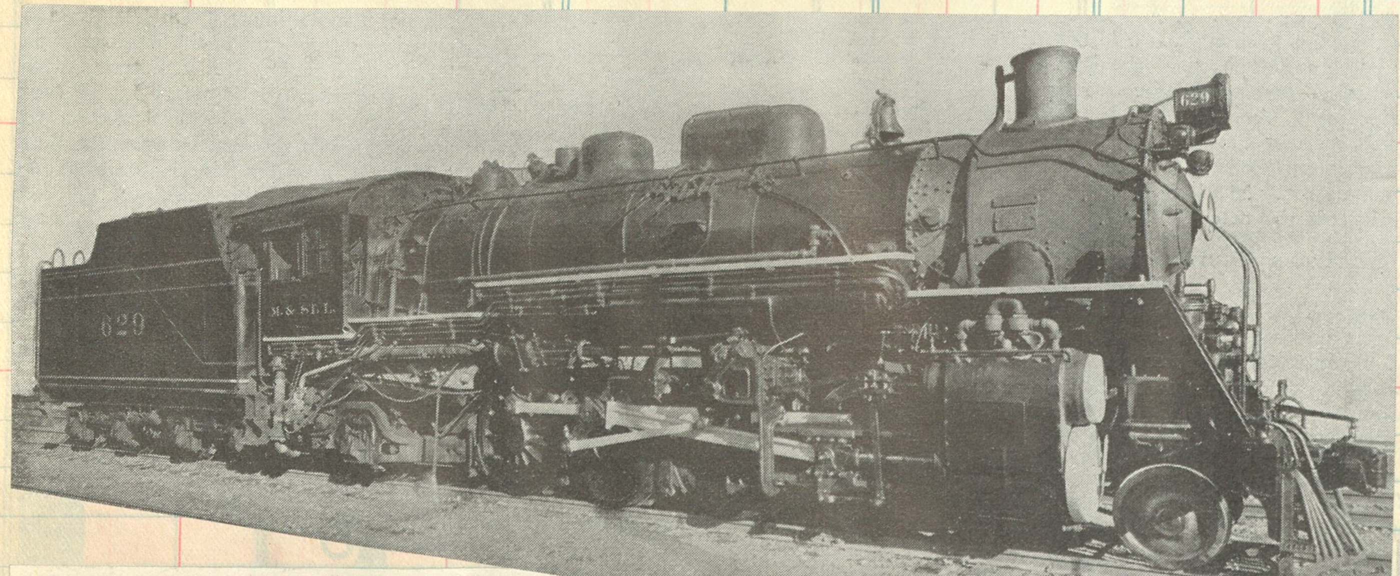

606
M. & ST. L.
606

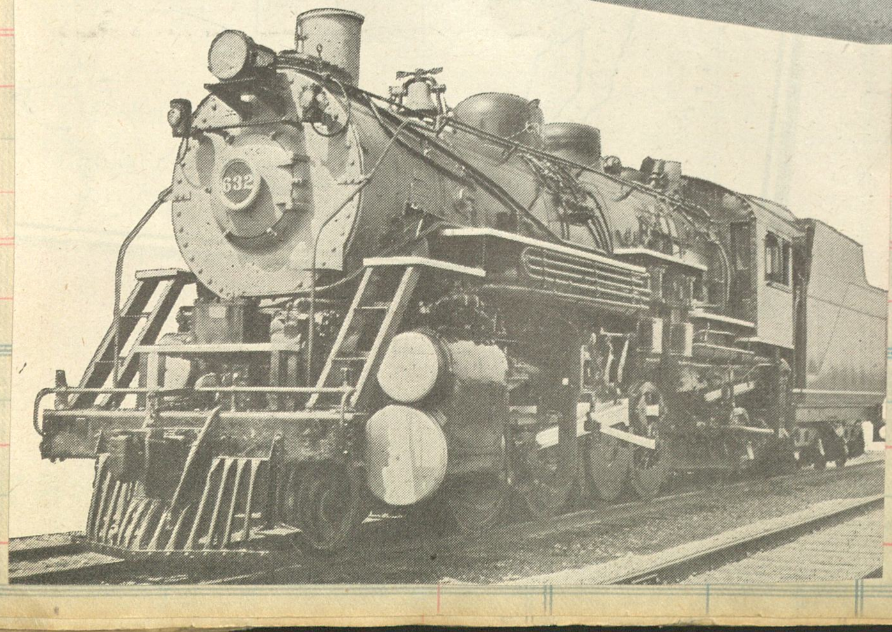

624
M. & ST. L.
624





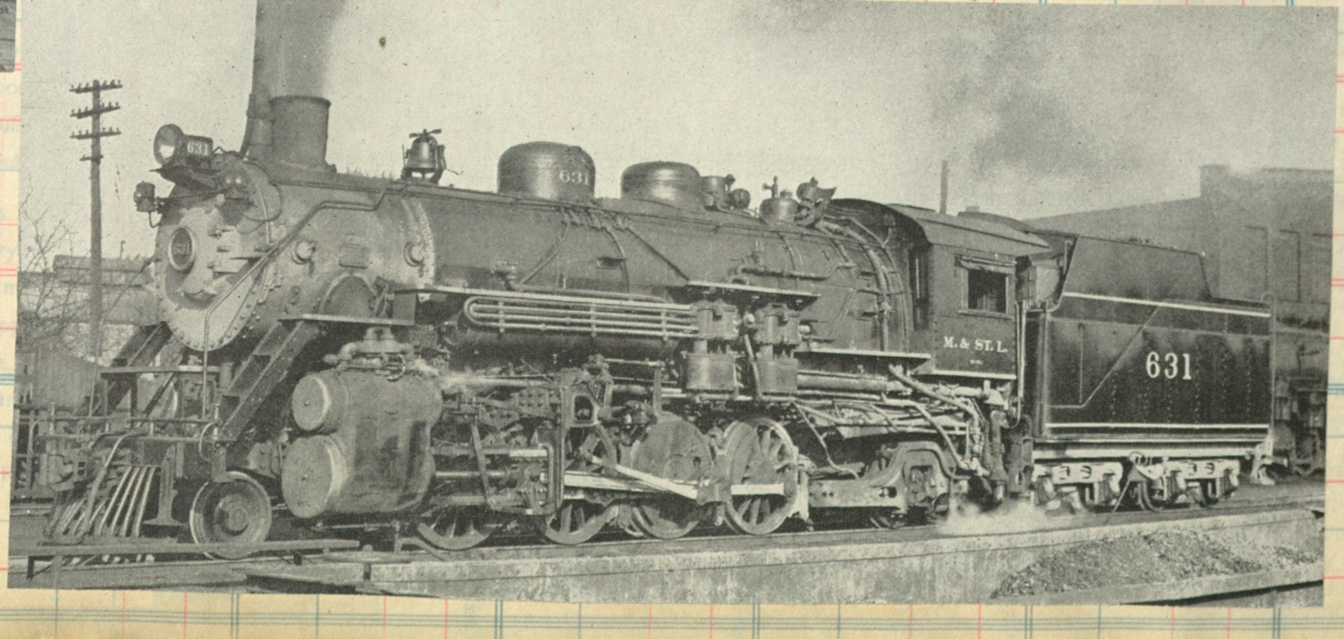
The 626 is displaying her "laundry" as she roars along near Monmouth on the Peoria line.


629
M. & ST. L.
629



The MIKADOS

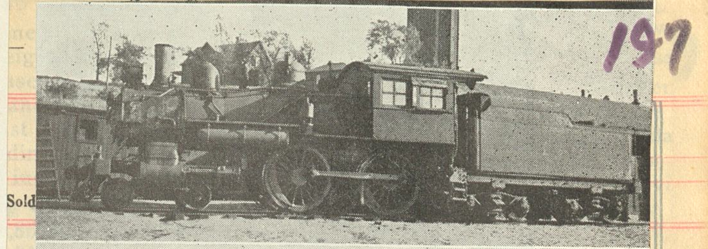
600-614 Schen 1915
615-619 Brooks 1916
620-634 Brooks 1920

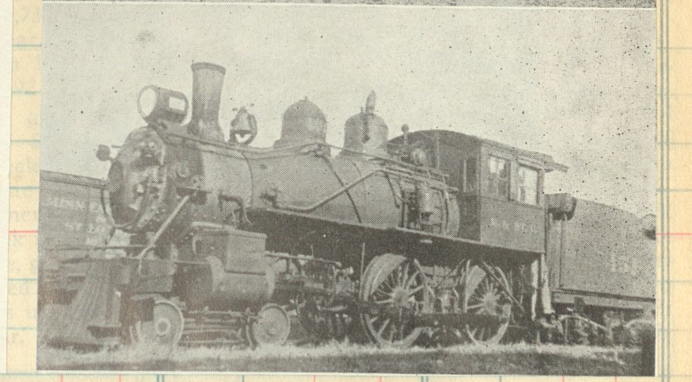

631
M. & ST. L.
631

**Albert Lea station.**

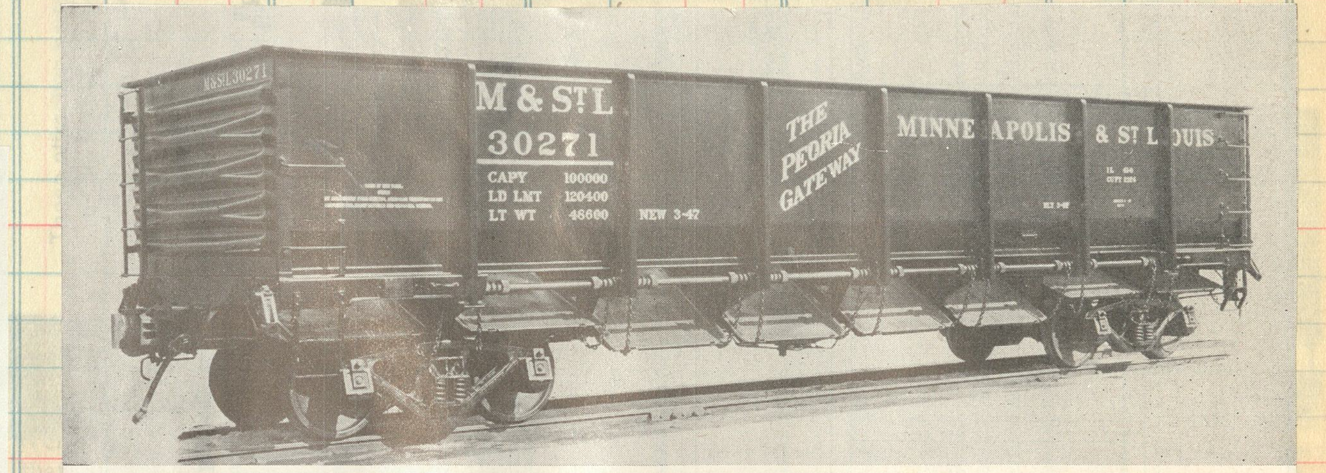
In the distance (southward) the M&StL branches, one line to Des Moines and another to Oskaloosa and Peoria. The Illinois Central branches off to the east a few miles south.

Locomotives that Had Not Turned a Wheel in Years Were Disposed of

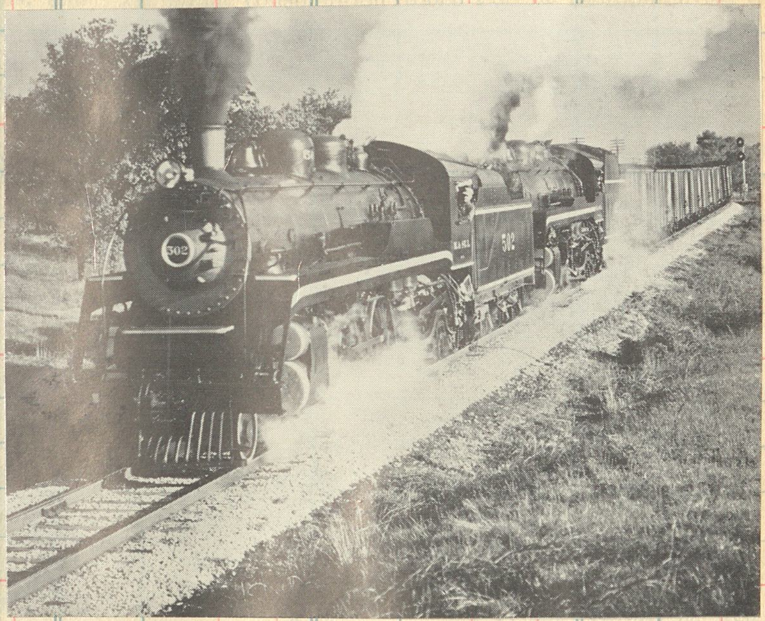


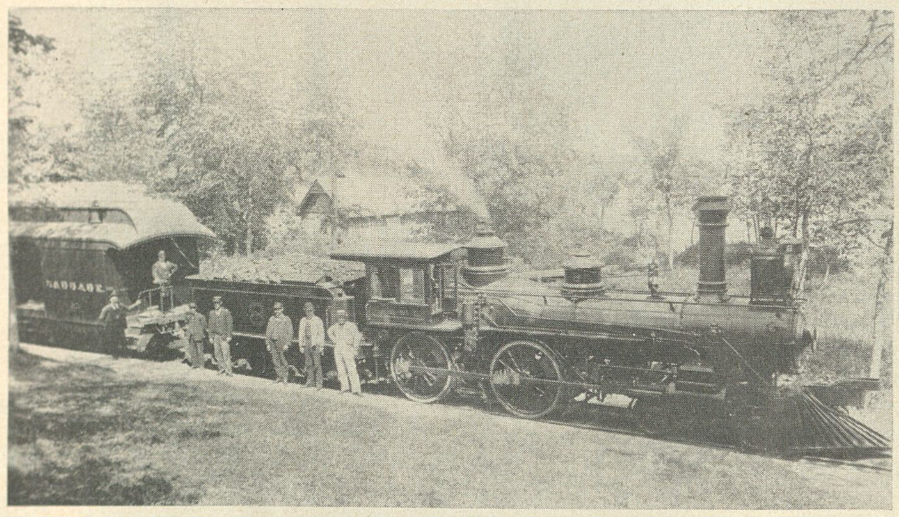


RAILROAD STATION NOW A MUSEUM—This small railroad station in North Redwood, Minnesota was the first home of a mail-order business which later spread throughout the United States. Richard W. Sears was a station agent for the Minneapolis & St. Louis Railway when he launched his business (now Sears-Roebuck) in 1886.


M & StL
30271
CAPY 100000
LD LMT 120400
LT WT 46600
NEW 3-47
THE PEORIA GATEWAY
MINNEAPOLIS & ST LOUIS

**Minneapolis & St. Louis 50-ton drop bottom gondola. Builder, General American Transportation Corp.**
Inside length, 41 ft. 0 in.; width, 9 ft. 6⅝ in.; height, 5 ft. 6 in.; capacity, 2,124 cu ft.; light weight, 48,600 lb.; load limit, 120,400 lb.

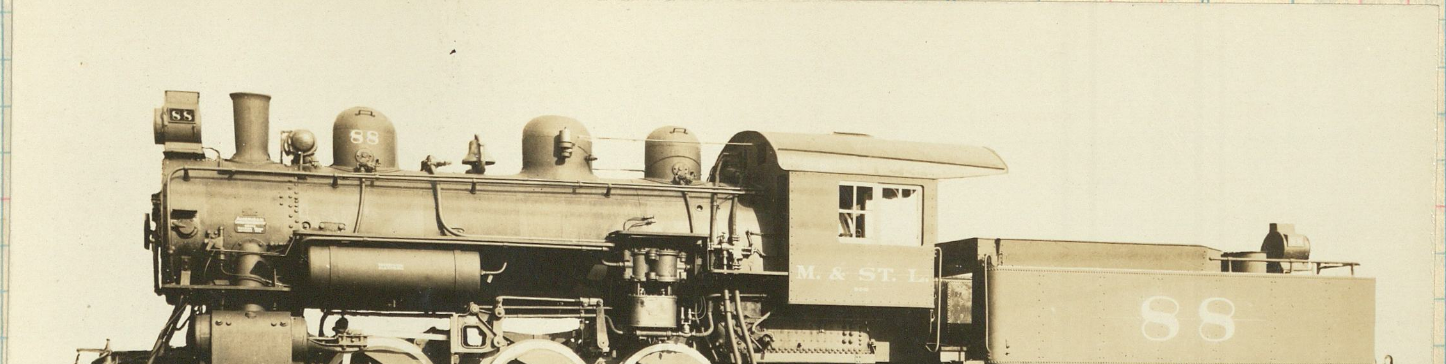


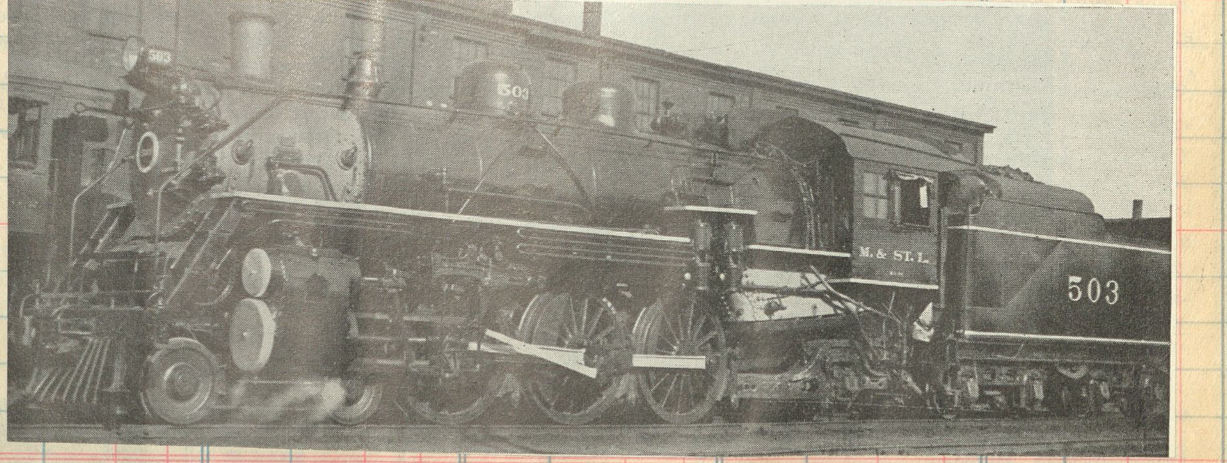


M&StL's Baldwin No. 8 pauses at Tonka Bay, Minn., in 1886. John B. Warta collection.

Keith Bregler collection

80-89
Pittsburgh 1916
c/n 56416-425




503
M. & ST. L.
503

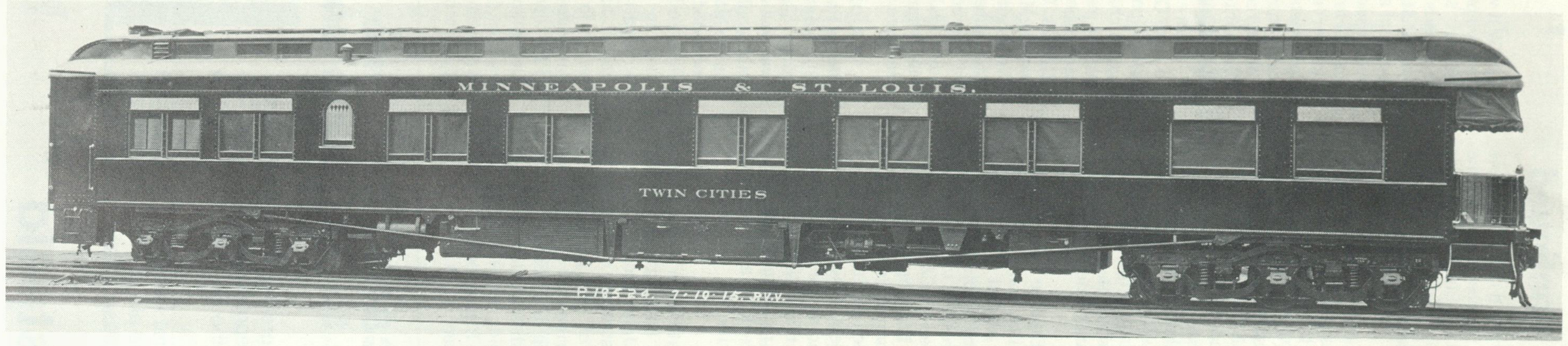
198

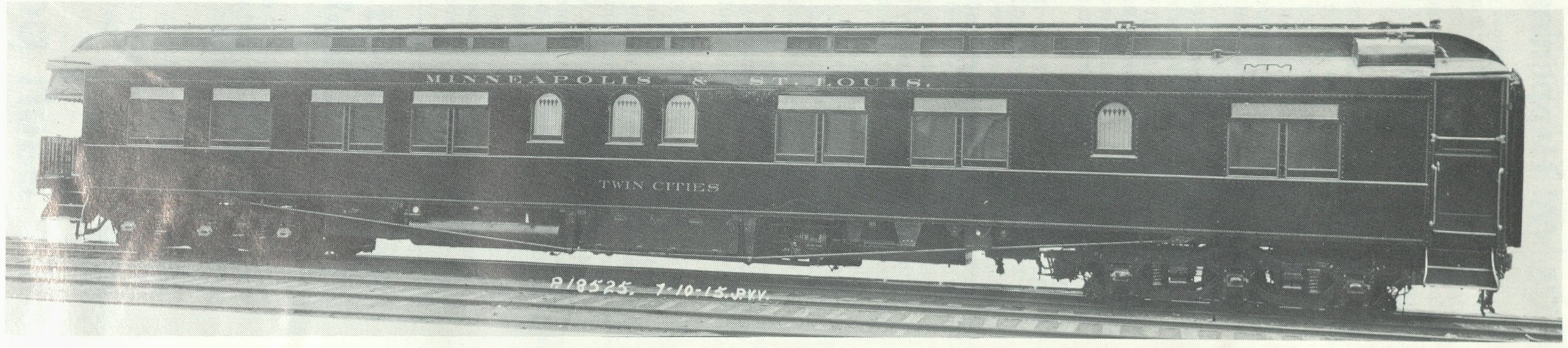
1925

M. & St. L. Officials on Inspection Tour.

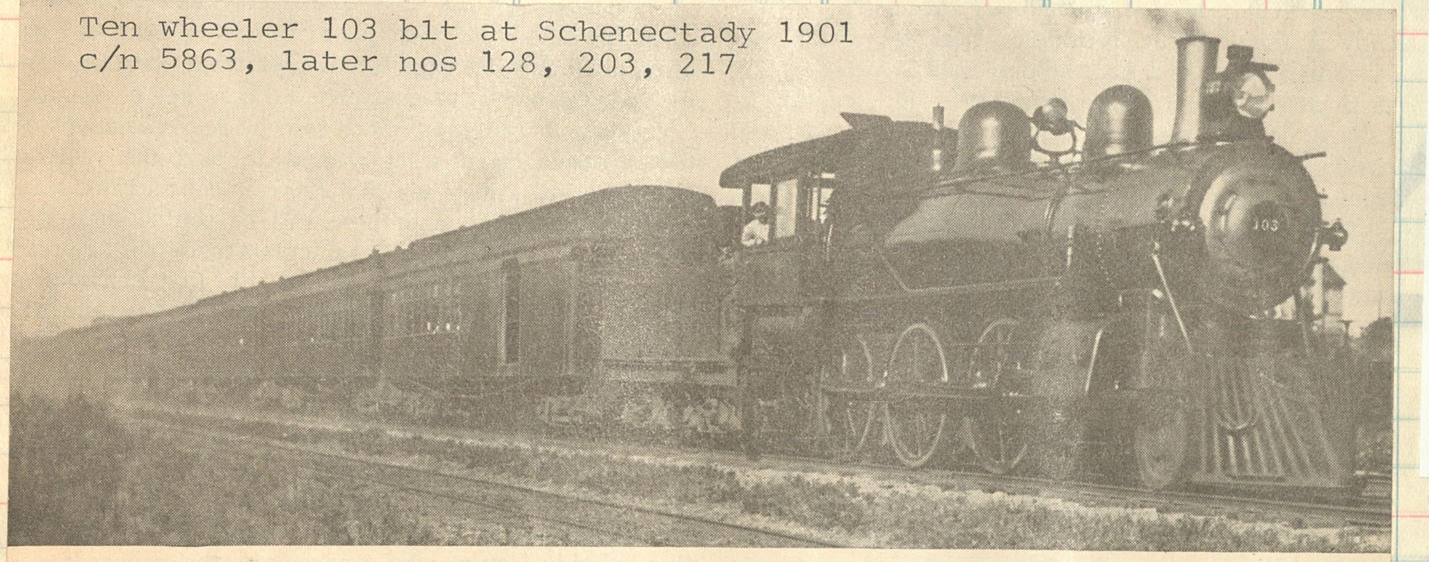
**THE FIRST BUSINESS CAR** to be named "Twin Cities" had the distinction of being the only business car in which the president of a railroad died. According to Lucius Beebe in his book, *"Mr. Pullman's Elegant Palace Cars,"* Newman Erb, president of the M&StL at the time, died in this car. Erb took over control of the M&StL in 1915 and had the name of the car changed to "Twin Cities." The car had originally been built for Cowin Hawley, then president of the road, and simply number 300. Does anyone know what happened to this car when the second "Twin Cities" was obtained in 1939? These photos were apparently taken by the Pullman Company in 1915.

*Smithsonian Institution Photos*


MINNEAPOLIS & ST. LOUIS.
TWIN CITIES
P18524. 7-10-15. RVV.

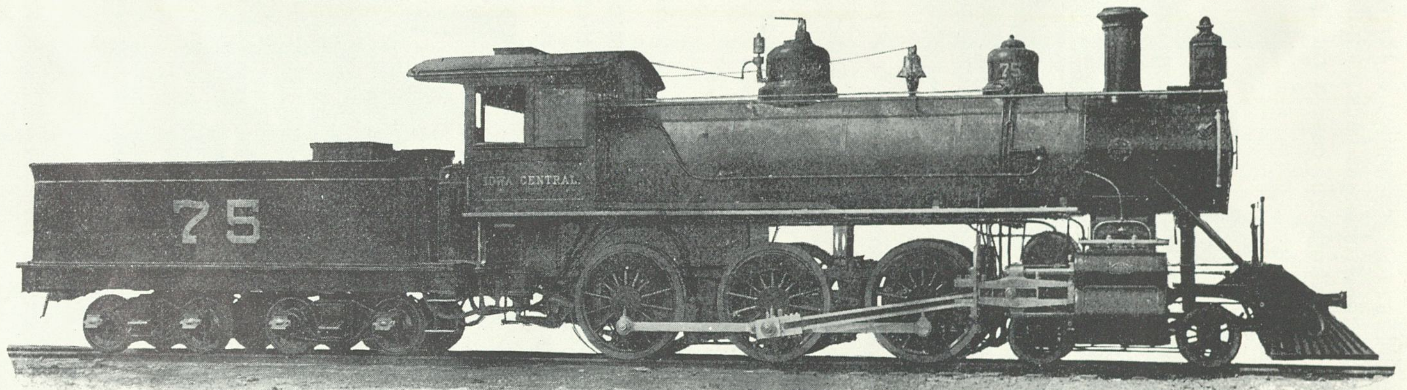

MINNEAPOLIS & ST. LOUIS.
TWIN CITIES
P18525. 7-10-15. RVV.

Ten wheeler 103 blt at Schenectady 1901
c/n 5863, later nos 128, 203, 217



PASSING CEDAR LAKE RUNNING TOWARD MINNEAPOLIS

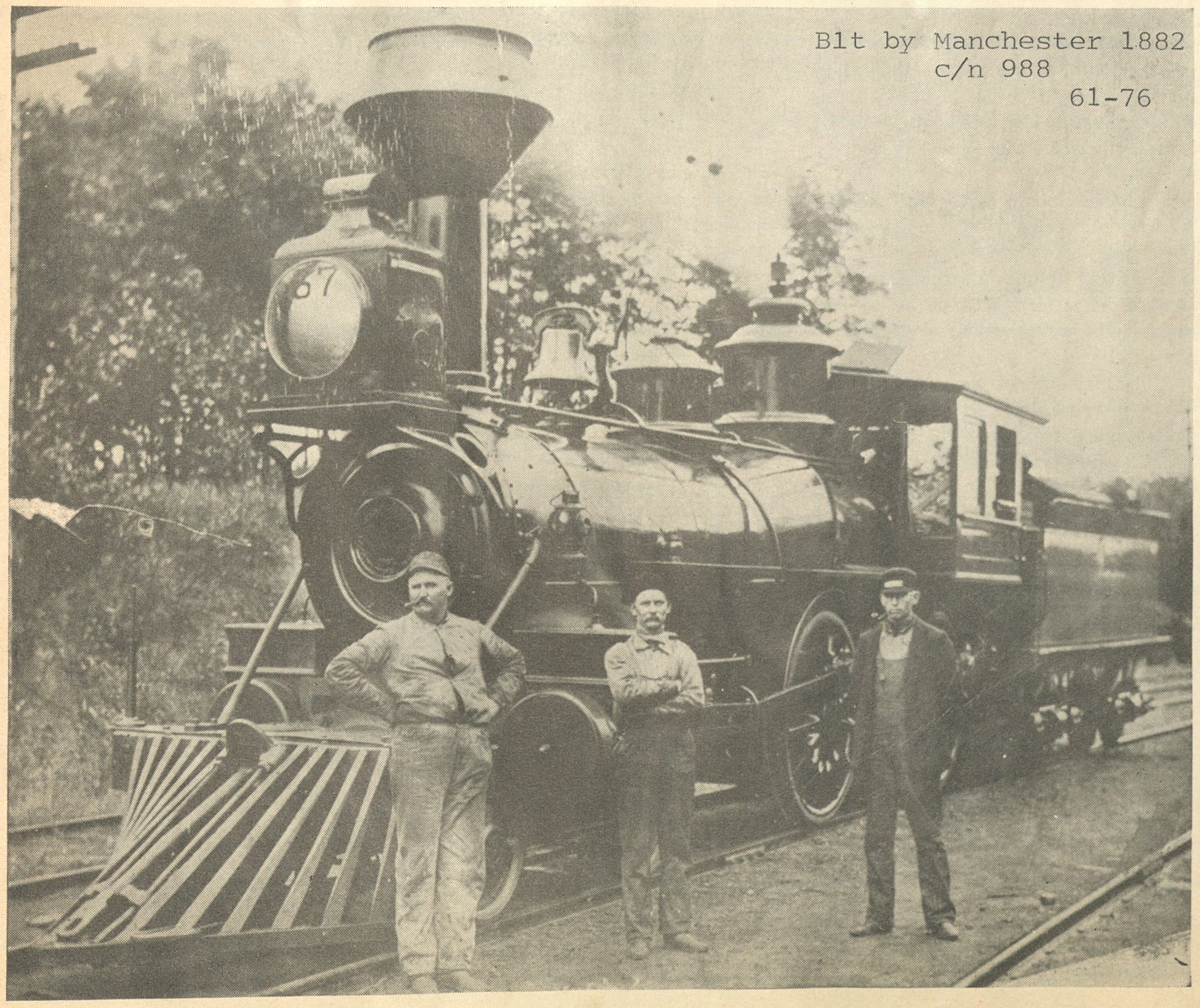
Minneapolis & St. Louis Railroad fast passenger train, engine 103. In cab window is Engineer Brother J. J. Thomas of Div. 180. Pictur


75
IOWA CENTRAL

74-79 c/n 17636 Baldwin 1900 renoed 219 M&StL 231

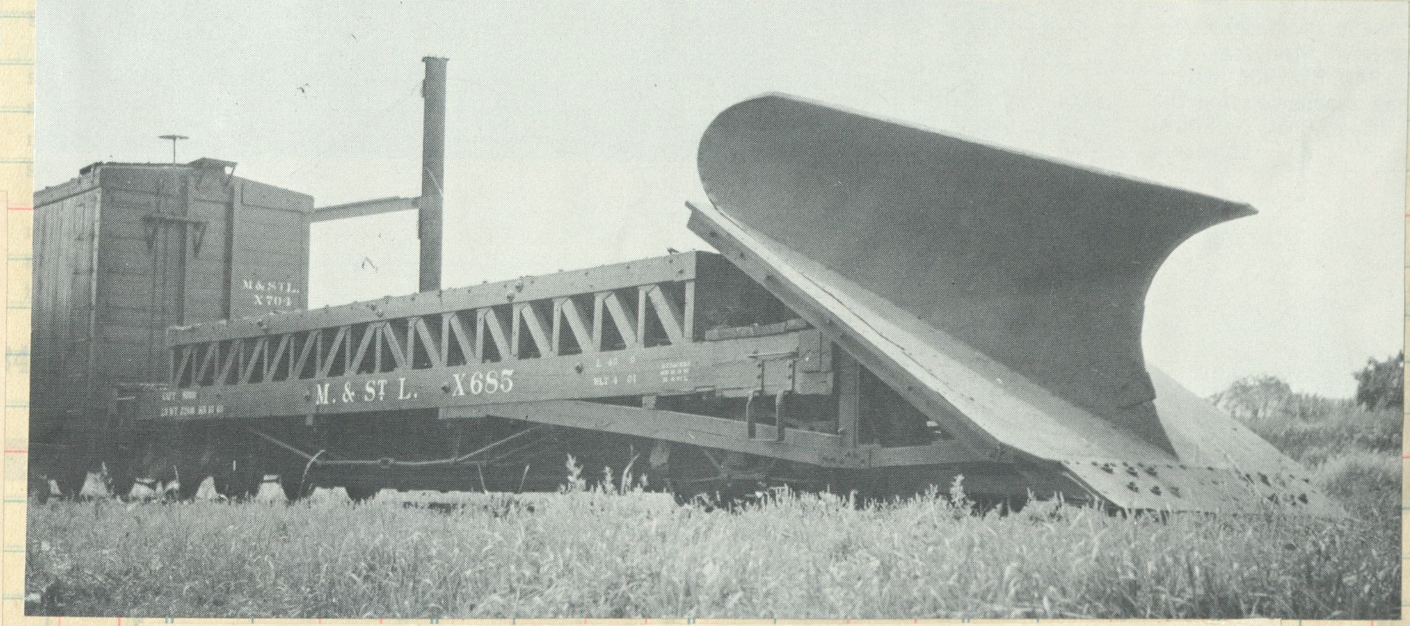
TEN-WHEEL LOCOMOTIVE, IOWA CENTRAL RAILWAY

Blt by Manchester 1882
c/n 988
61-76

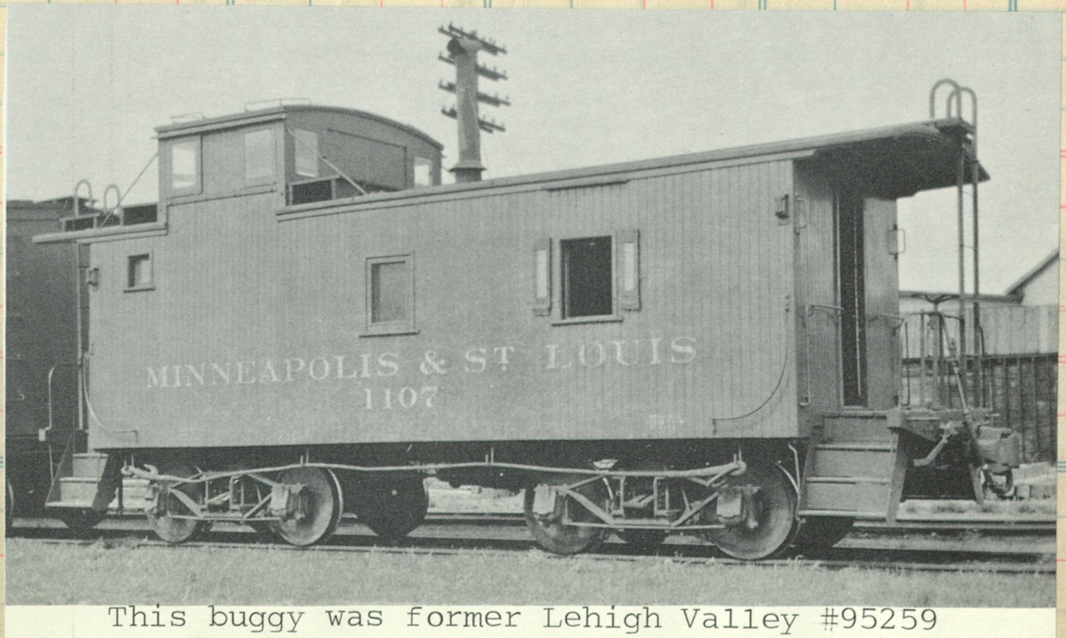


THIS WAS A BIG ENGINE 46 YEARS AGO

Locomotive 67 of the Minneapolis & St. Louis Railway was photographed in 1892 in the yards at Albert Lea, Minn. Photograph submitted by Brother A. H. Titus, Div. 180.

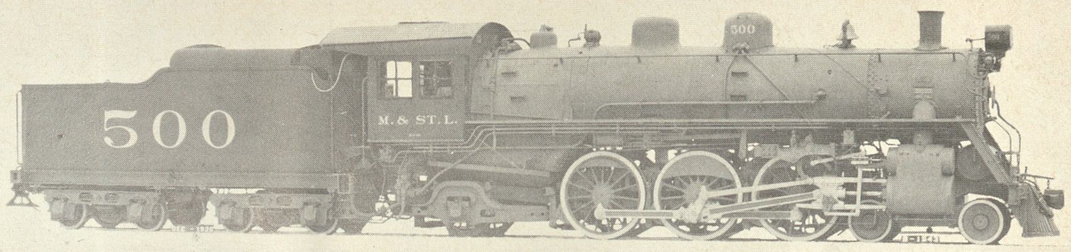

M&STL.
X704
M. & St L. X685

A type of wedge plow that found favor also on the
C&NW, Milw, CGW, CB&Q


MINNEAPOLIS & ST LOUIS
1107

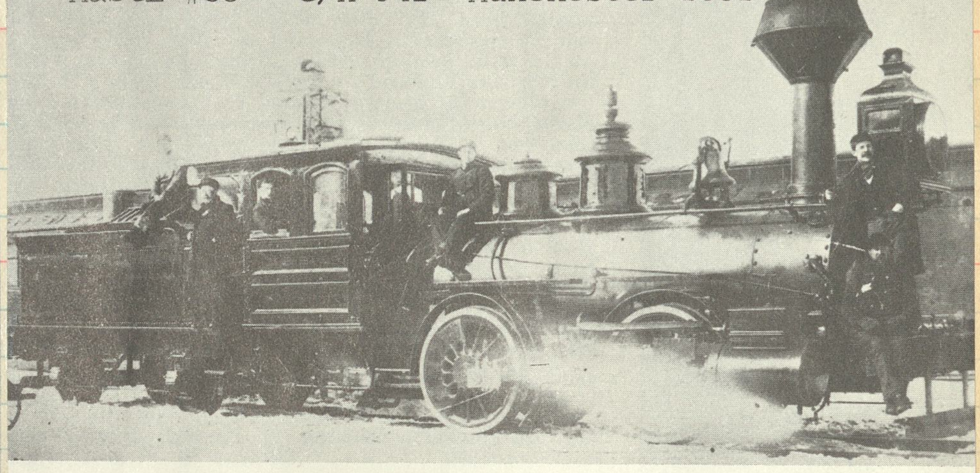
This buggy was former Lehigh Valley #95259

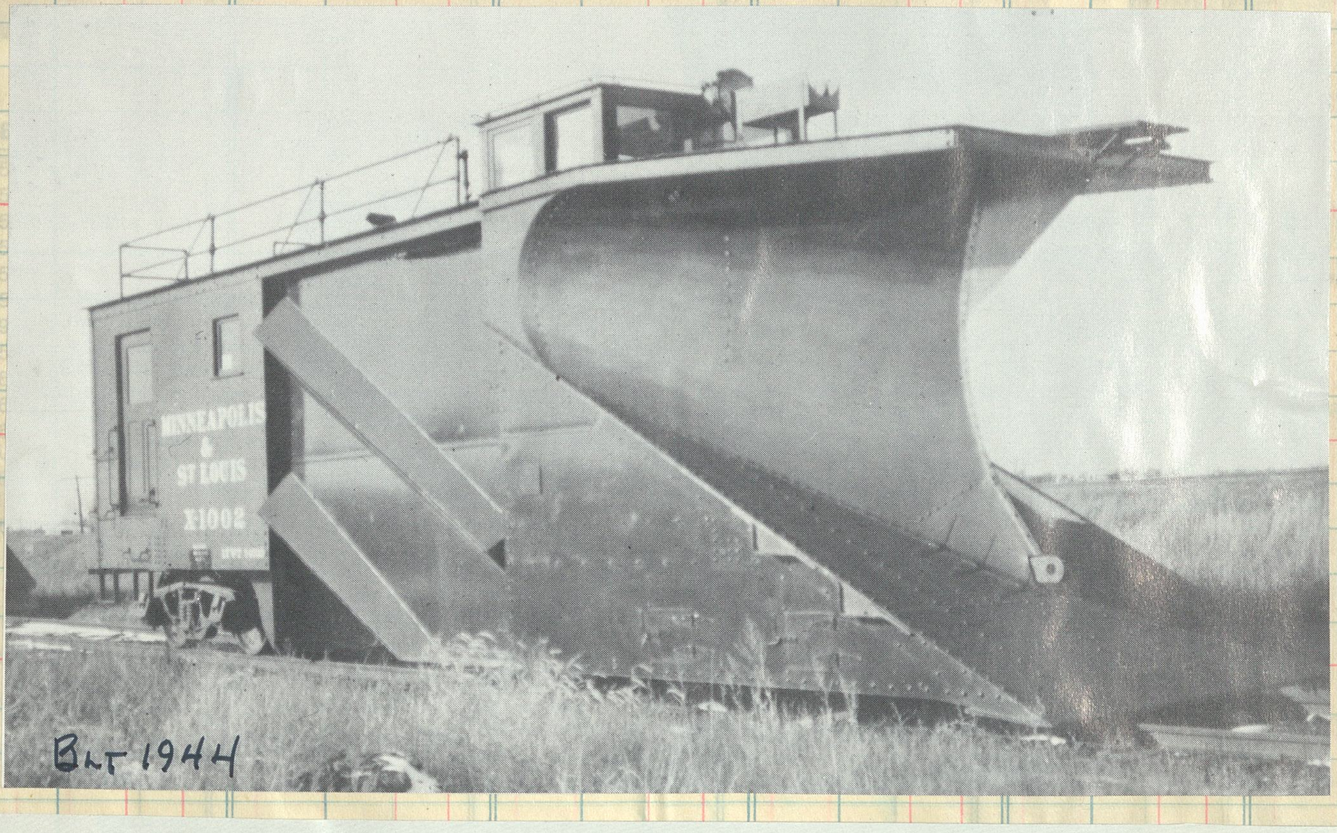
Five (500-504) petite Pacifics constructed by Brooks in 1920
c/n 62577



These proved to be the last engines rec'd by M&StL

M&StL #53 c/n 942 Manchester 1881





Blt 1944

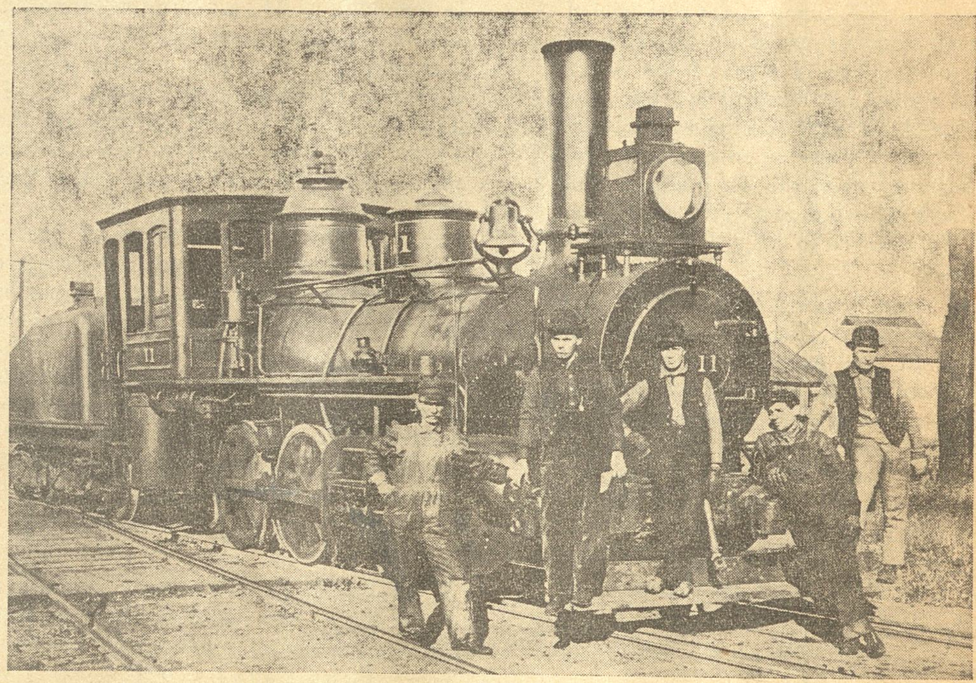


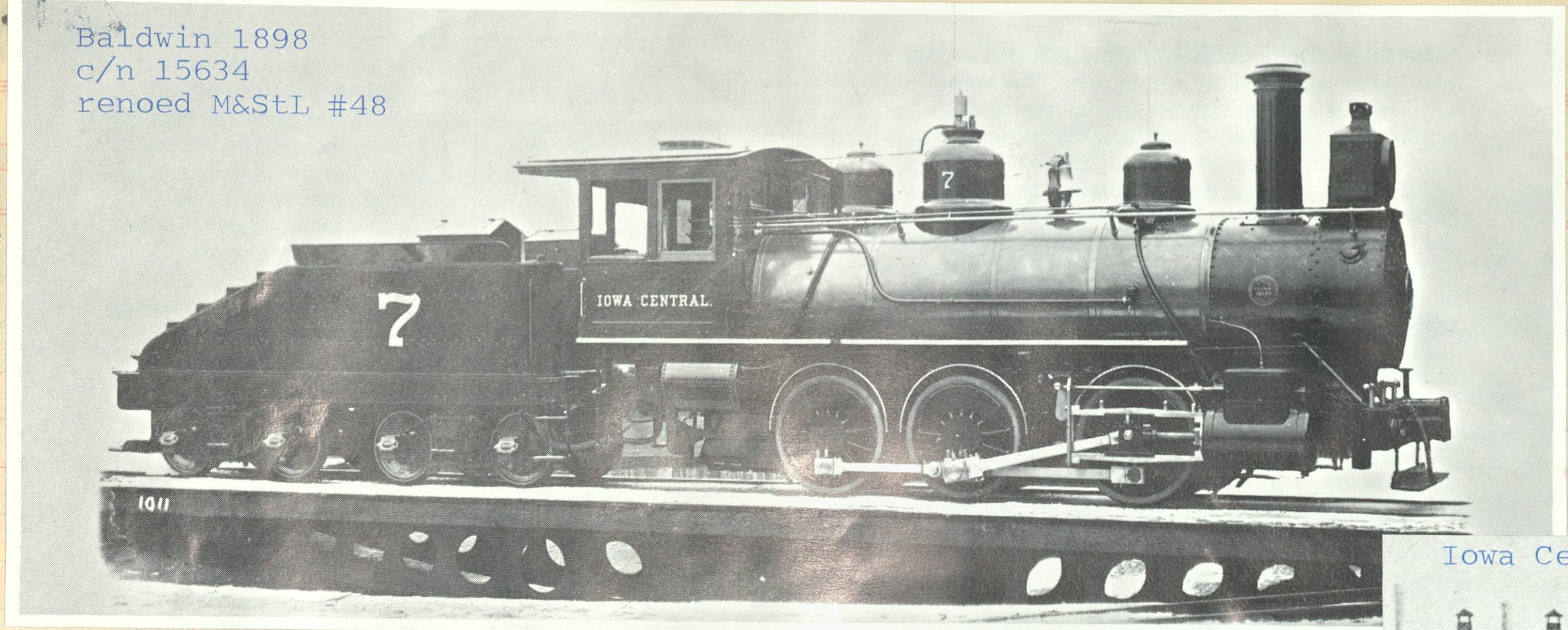
Photo from Alfred Russell

Switch engine Number 11 in 1908 on Iowa Central crossover switch near Oskaloosa, Iowa. Crew from left to right: Engineer Gene Falis, Engine Foreman C.O. ("Chuck") Cooper, Helper Billy McGraph and Fireman George Gibbons

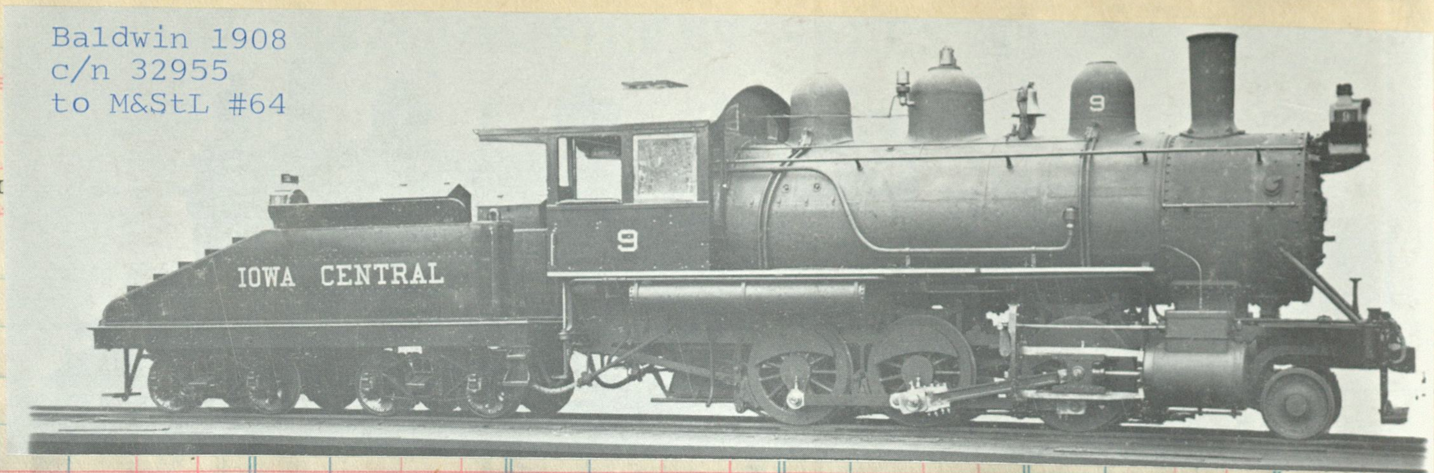
502
MINNEAPOLIS & ST LOUIS

*Engine 502, a splendid light Pacific, was for many years M&StL President Lucien Sprague's pride and joy. The Summer of 1949 found her featured on-stage at the 1949 Chicago Railroad Fair's pageant, "Wheels A' Rollin'." On a final inspection trip before her departure, 502 pauses for a portrait at Marshalltown, Ia. with a consist including a company-owned Pullman and two official cars. Bringing up the rear, undoubtedly, is the "Twin Cities," the car regularly used by President Sprague.*

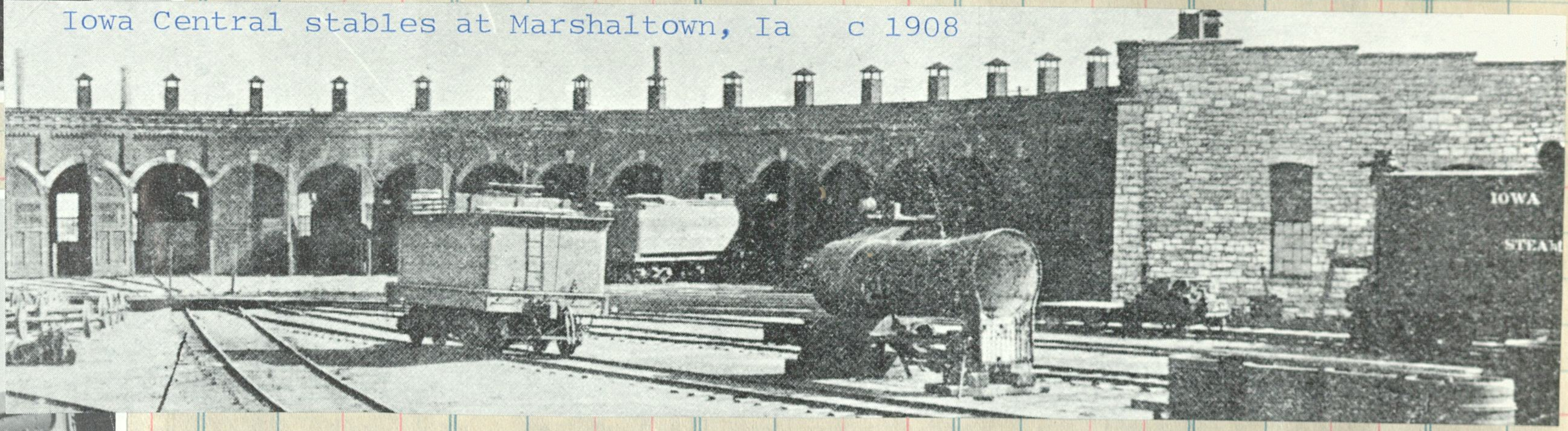
M&StLRR/James R. Sullivan collection

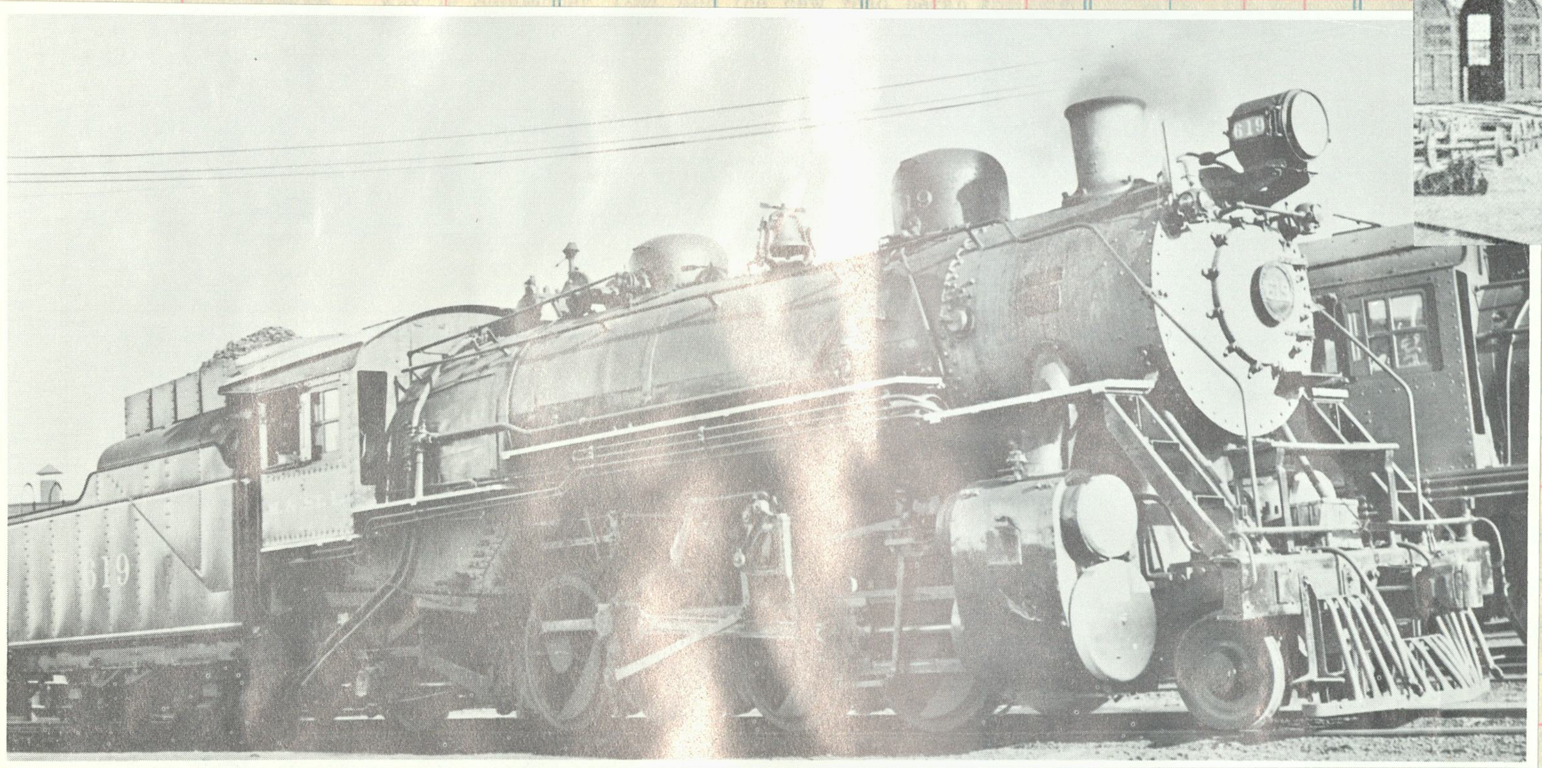

Baldwin 1898
c/n 15634
renoed M&StL #48

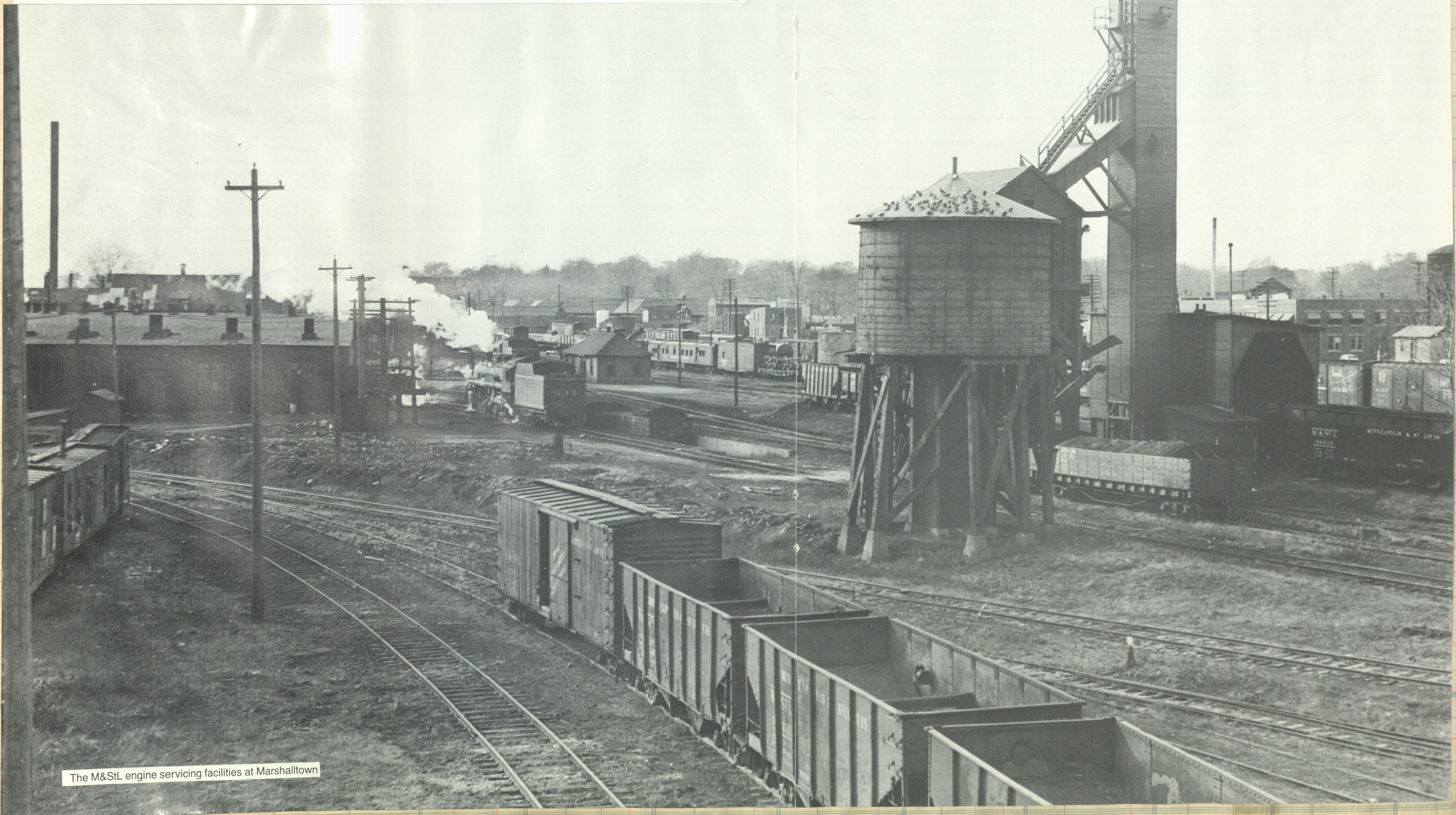
IOWA CENTRAL
7
1011


Baldwin 1908
c/n 32955
to M&StL #64

IOWA CENTRAL
9


Iowa Central stables at Marshaltown, Ia   c 1908

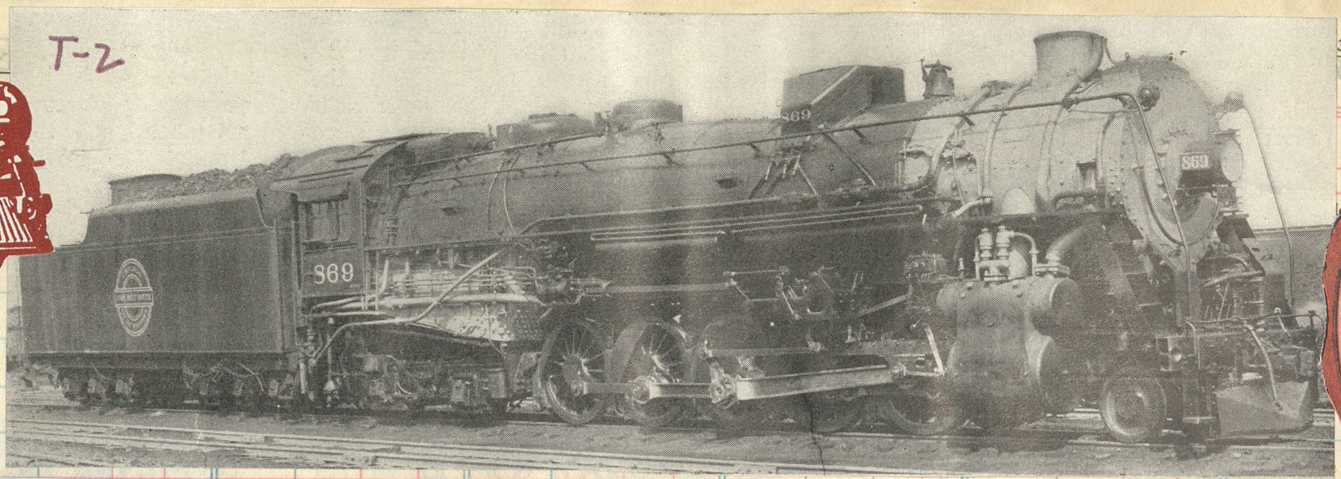



The M&StL engine servicing facilities at Marshalltown

M&StL
MINNEAPOLIS & ST LOUIS

CHICAGO
GREAT
WESTERN
RAILROAD

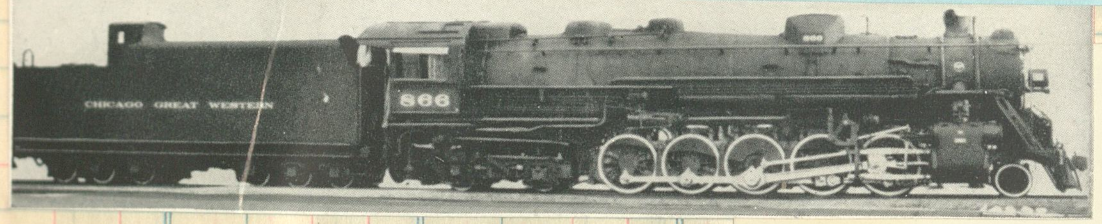
T-2



#869 (c/n 61577) one of fifteen, 865-879, delivered by Baldwin in 1930

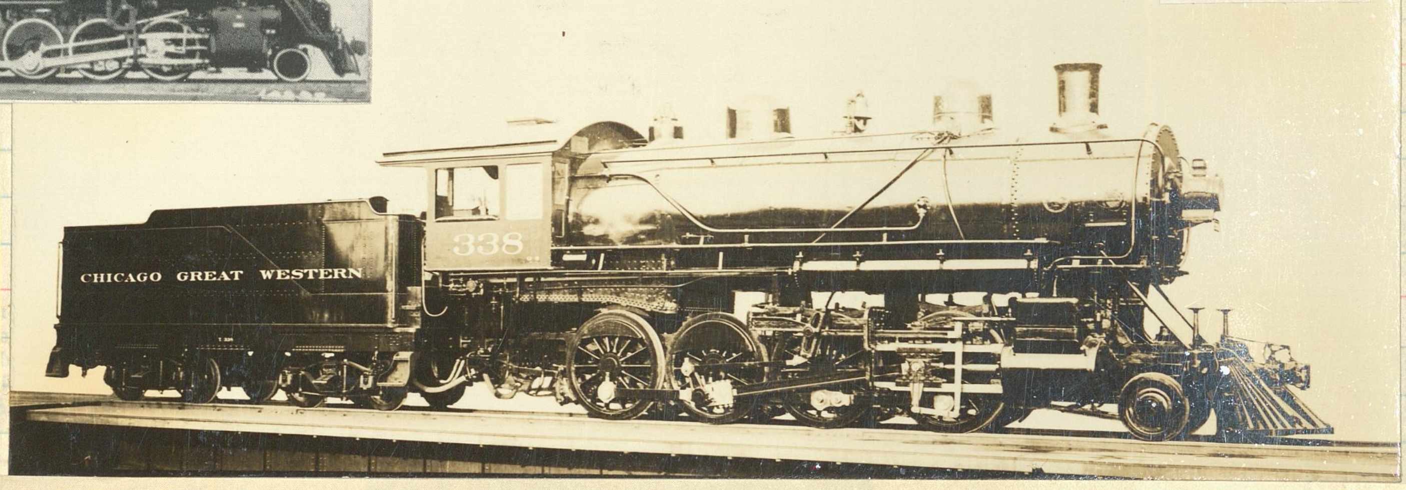
CHICAGO
CORN BELT ROUTE
CHICAGO GREAT WESTERN

OKM



In 1930 the C.G.W. updated its freight power roster with the purchase of thirty six stocky Texas (2-10-4) type. Fifteen noed 850-864 and six 880-885 were delivered by Lima while Baldwin supplied nos 865-879. These were to be the last engines ordered by the Great Western.

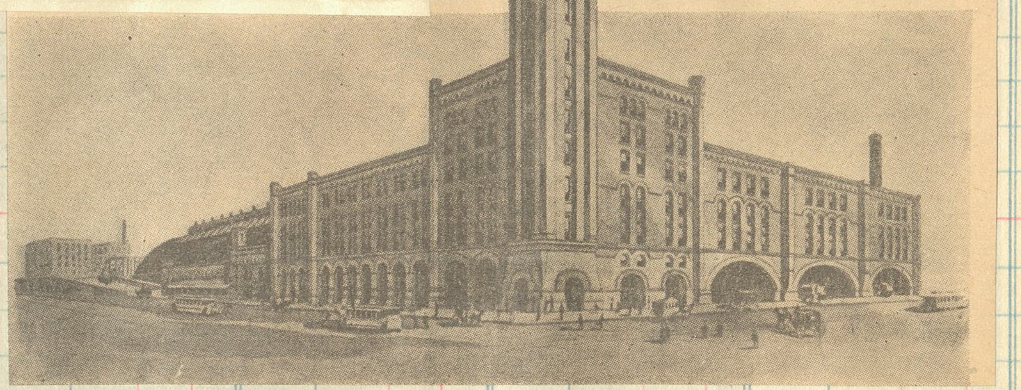
c/n 33958



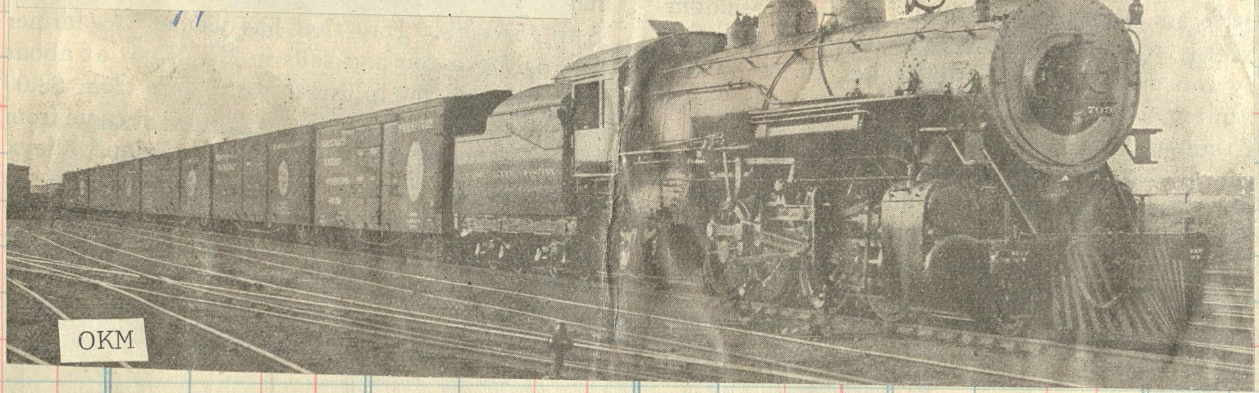
In 1909 Baldwin built twenty sturdy Consolidations noed 320-339

In 1927 operating 1,496 miles with 273 engines, 9,843 freight and 214 passenger cars.

HORSE-CARS are dwarfed out of proportion in this old drawing of the CGW Grand Central Passenger Station, Chicago

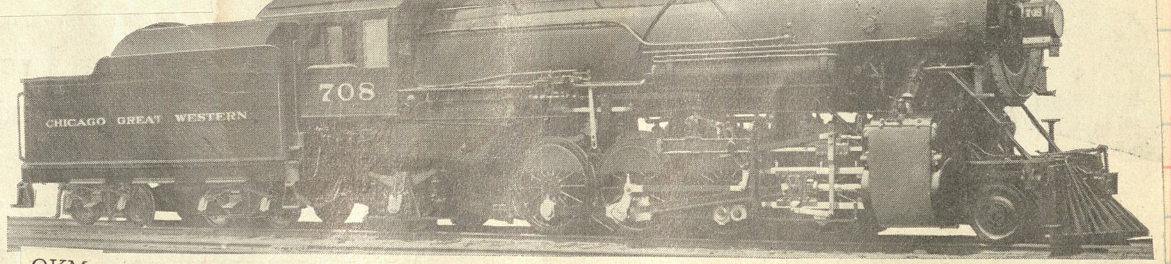


2-8-2 class L-1s 700-709
Baldwin 1912 c/n 37988



OKM

c/n 37987

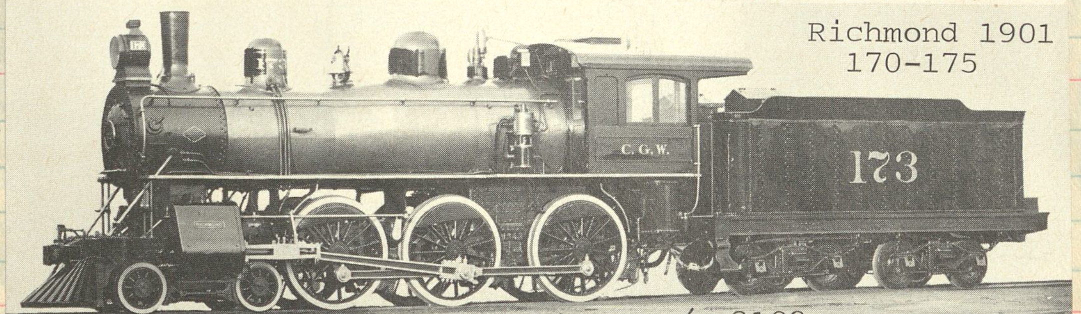


OKM

Mikado Type Locomotive, Chicago Great Western Ry.

Renoed 738 [See pg 208]

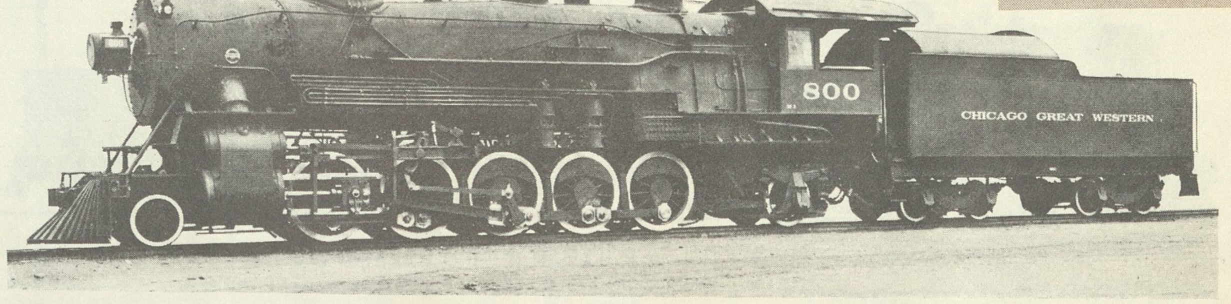
Richmond 1901
170-175



c/n 3109

## CHICAGO GREAT WESTERN RAILROAD

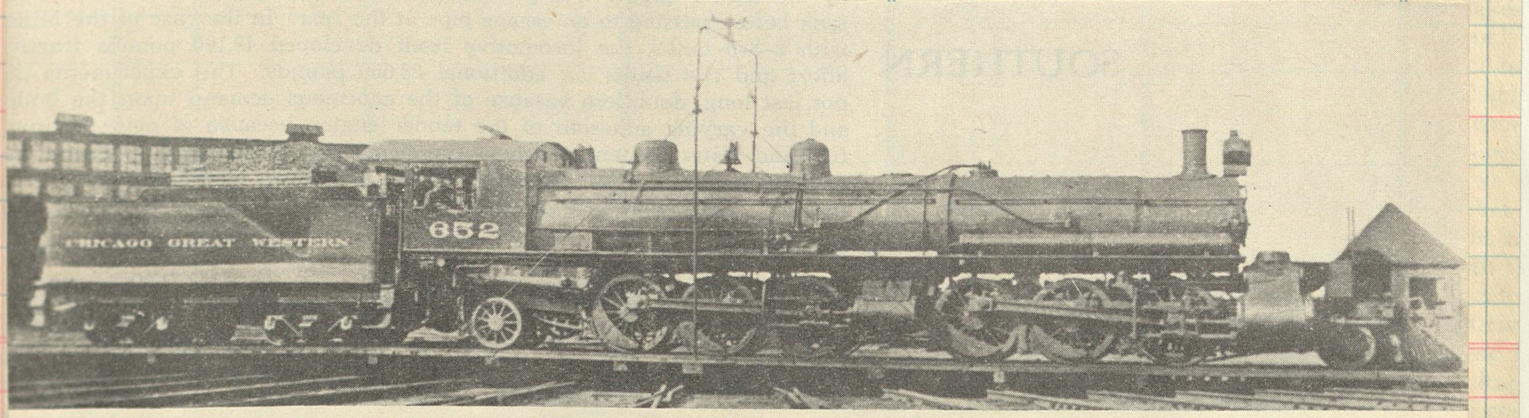
800-804
Baldwin 1916
c/n 44209
class M-1



SANTA FE TYPE FREIGHT LOCOMOTIVE

6 Locomotives like the above are being fired by Duplex Stokers

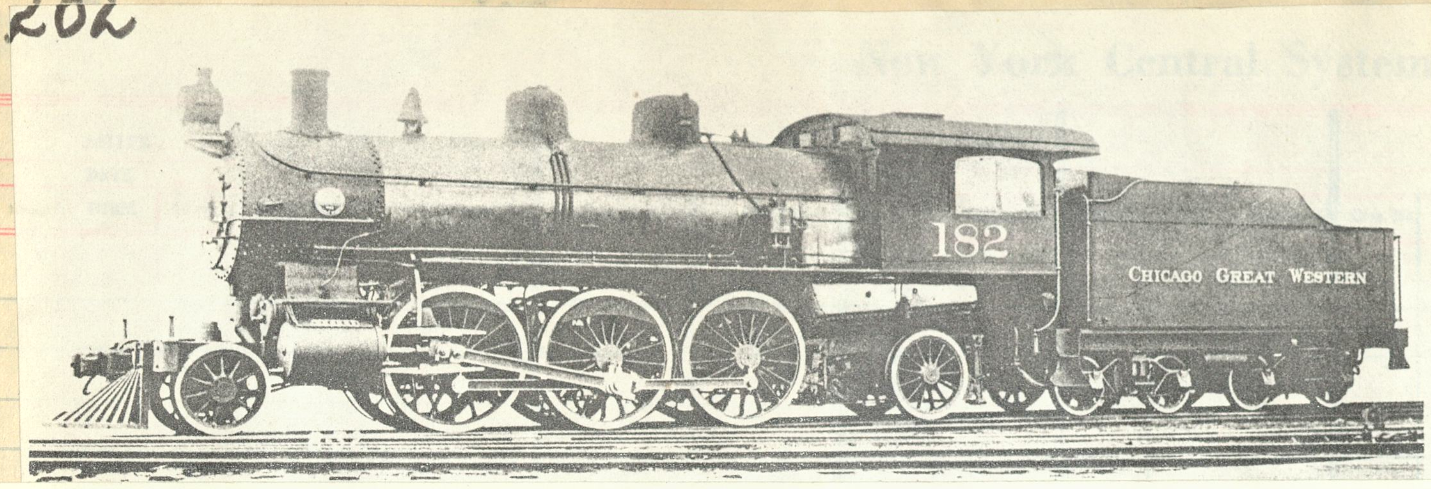
| | |
|---|---|
| Cylinders | 30 x 32 in. |
| Driving wheels, diameter | 60 in. |
| Steam pressure | 180 lbs. |
| Boiler diameter | 84 in. |
| Tubes, length | 21 ft. |
| " number | 45—5½ in. |
| " " | 240—2¼ in. |
| Heating surface, tubes | 4,312 sq. ft. |
| " " fire box | 291 sq. ft. |
| " " arch tubes | 53 sq. ft. |
| " " total | 4,656 sq. ft. |
| " " superheater | 1,164 sq. ft. |
| Fire box | 164 x 96 in. |
| Grate area | 78 sq. ft. |
| Wheel base, driving | 21 ft.—4 in. |
| " " engine | 40 ft.—7 in. |
| " " " and tender | 73 ft.—9¼ in. |
| Weight, leading | 29,600 lbs. |
| " driving | 277,700 lbs. |
| " trailing | 40,100 lbs. |
| " engine | 347,400 lbs. |
| " tender | 184,600 lbs. |
| Tender capacity, water | 10,000 gals. |
| " " coal | 16 tons |
| Maximum tractive power | 73,500 lbs. |
| Factor of adhesion | 3.8 |



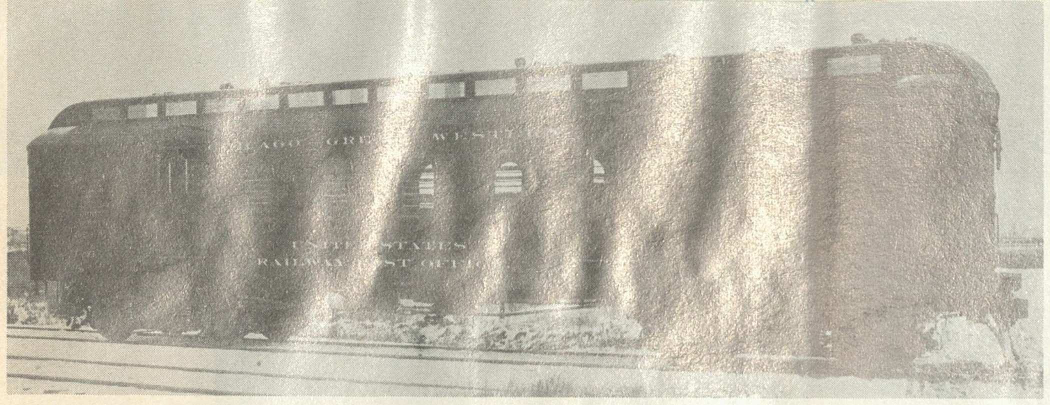
The 652, class H-2, was rebuilt in 1910 from #250 (2-6-2) and a front unit fm Baldwin. Reblt again in 1915 as 4-6-2 #952

ANOTHER example of Prairie projection came out of the Chicago Great Western's Oelwein (Ia.) Shops in 1910 when the road made three Mallet 2-6-6-2's by adding Baldwin low-pressure front-end units to existing engines. The rebuilds — Nos. 650-652 — weighed a modest 157½ tons each without tender, yet starting tractive effort was raised from 33,000 pounds to 52,000 pounds, or 57.5 per cent. The steam-generating capacity of the germ 2-6-2 was altered not at all, but Great Western counted on two other factors to make its half-breeds go: second, or compound, use of the steam, and adoption of the lengthened front end of the boiler as a feedwater heater. It is doubtful if the 652 was thought attractive.

202


182
CHICAGO GREAT WESTERN

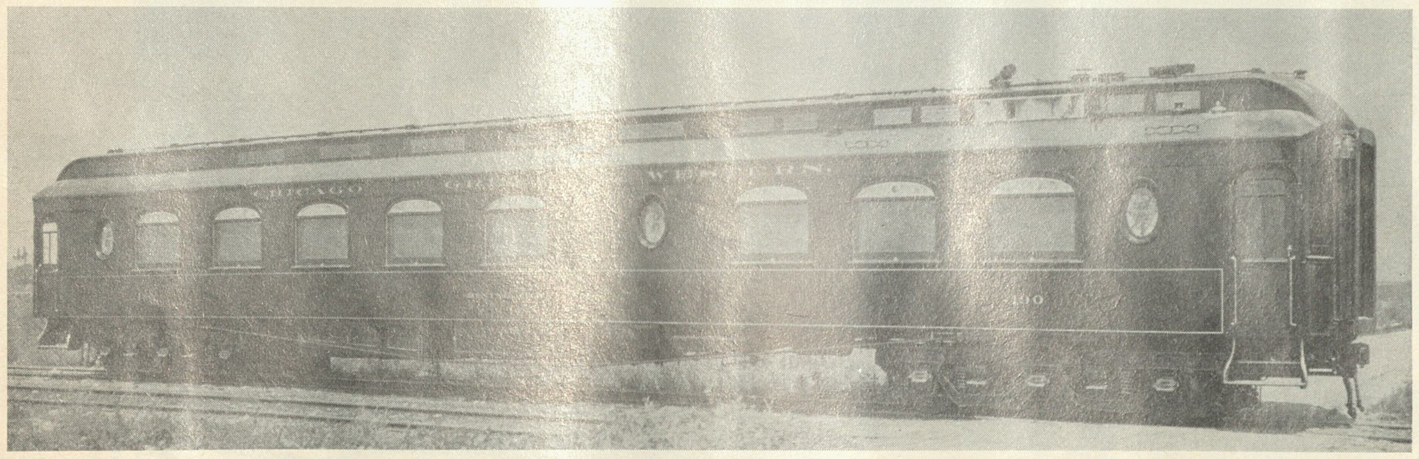
A high wheeled Prairie (73") for the Great Western Limited. One of three constructed by Brooks in 1902 [180-182] c/n 25695. Reblt as 4-6-2 #923.


Pullman-Standard.

**RAILWAY POST OFFICE No. 91** and twin No. 90 were Pullman-built in 1903.

**COACH 268** — one of 11 delivered by Pullman in 1904 — bore patrons of the Corn Belt Route along in varnished style.

Pullman-Standard.


Pullman-Standard.

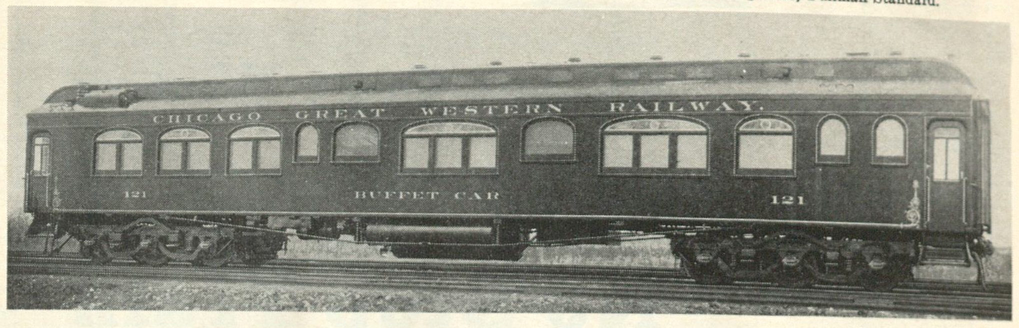
**DINING CAR 190** — a Pullman creation of 1903 — seated 30 in an over-all length of 70 feet. Six-wheel trucks steadied waiters.

# Great trains of the Great Western

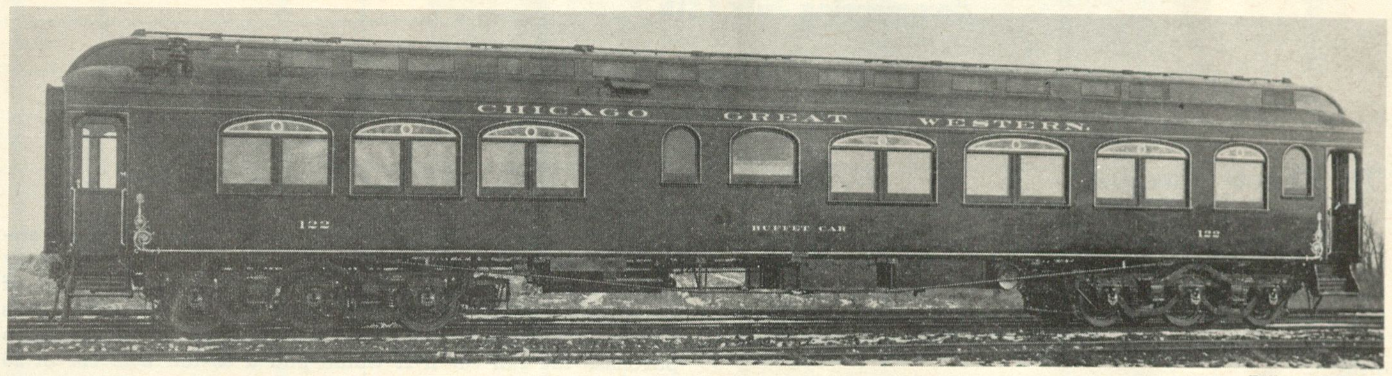
**BUFFET CAR 195** (right) left Pullman Works in 1898 as a combination vehicle containing a buffet-smoking room and coach accommodations. Pullman modernized exterior of car in 1903 (lower right) and CGW renumbered car to 121.

CHICAGO GREAT WESTERN RAILWAY.
BUFFET CAR
195

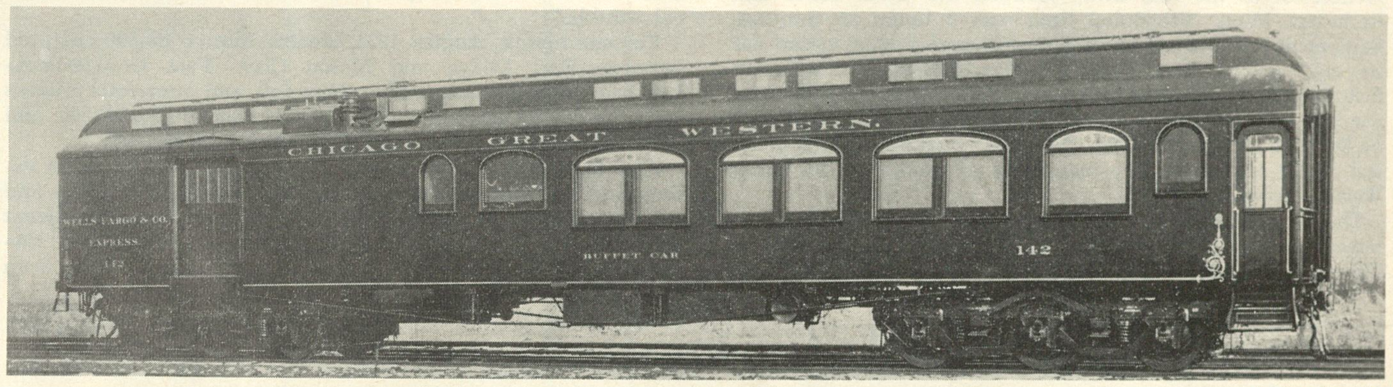
Both photos, Pullman-Standard.


CHICAGO GREAT WESTERN RAILWAY.
BUFFET CAR
121

**BUFFET CAR 122**, built by Pullman in 1903, was similar to 121; mixed smoking room with coach accommodations.

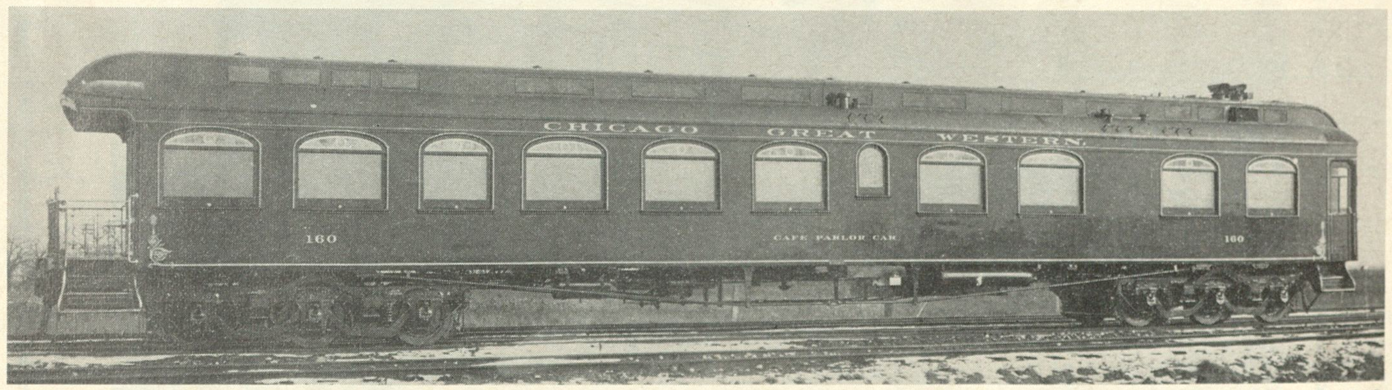

CHICAGO GREAT WESTERN.
122
BUFFET CAR

Pullman-Standard.


CHICAGO GREAT WESTERN.
WELLS FARGO & CO.
BUFFET CAR
142

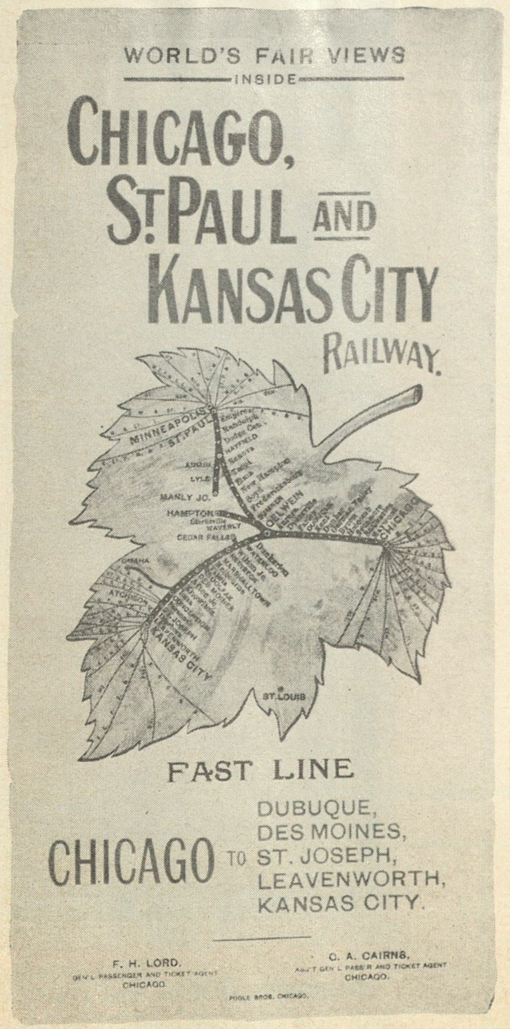
Pullman-Standard.

**EXPRESS-BUFFET 142** built by Pullman in 1903 for Great Western Limited was 79 feet long; hosted Wells Fargo in forward end.


CHICAGO GREAT WESTERN.
160
CAFE PARLOR CAR

Pullman-Standard.

**OBSERVATION-CAFE 160** was built in 1903 for day trains; contained parlor, cafe, kitchen; was painted olive green and striped in gold.


WORLD'S FAIR VIEWS
INSIDE

CHICAGO,
ST. PAUL AND
KANSAS CITY
RAILWAY.

MINNEAPOLIS
ST. PAUL
LYLE
MANLY JC.
HAMPTON
WAVERLY
CEDAR FALLS
OELWEIN
DUBUQUE
CHICAGO
WATERLOO
MARSHALLTOWN
DES MOINES
OMAHA
ATCHISON
ST. JOSEPH
LEAVENWORTH
KANSAS CITY
ST. LOUIS

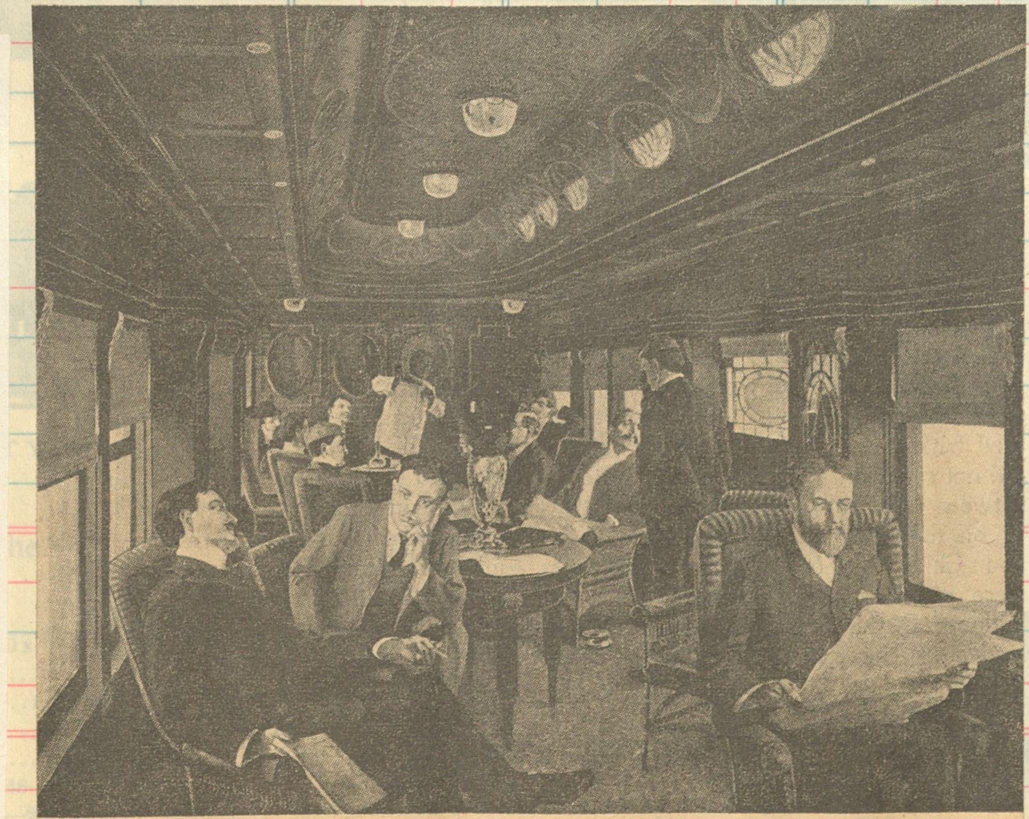
FAST LINE

CHICAGO TO DUBUQUE,
DES MOINES,
ST. JOSEPH,
LEAVENWORTH,
KANSAS CITY.

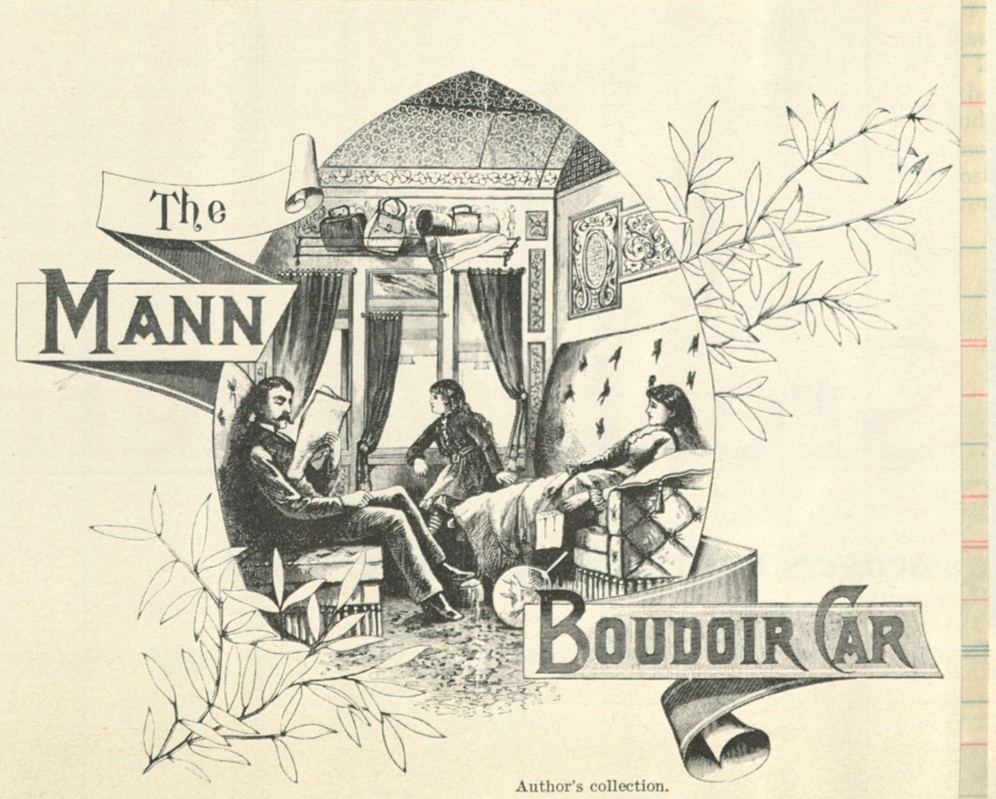
F. H. LORD.
GEN'L PASSENGER AND TICKET AGENT
CHICAGO.

C. A. CAIRNS.
ASS'T GEN'L PASS'R AND TICKET AGENT
CHICAGO.

POOLE BROS. CHICAGO.

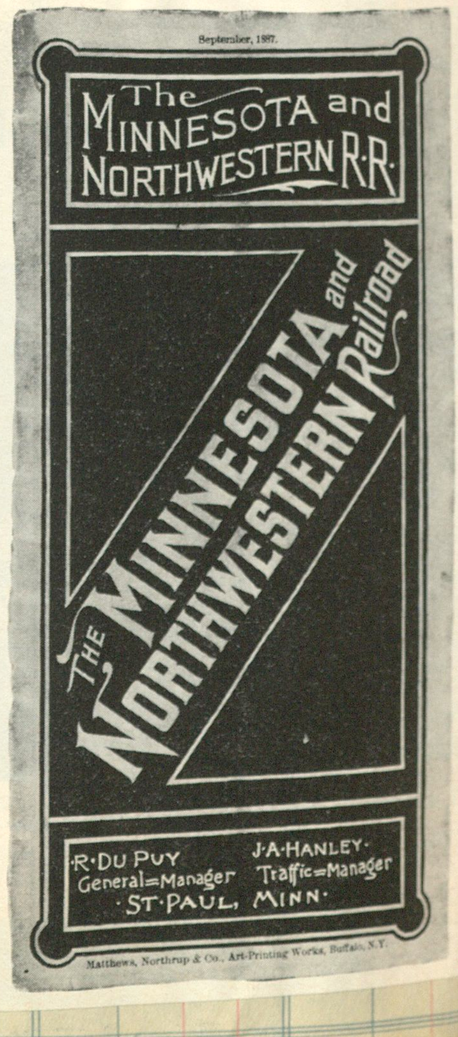


"I SEE where a man named William J. Bryan is going to run for President." Club-car patrons discuss the latest news of the day as the *Great Western Limited* speeds over the rails between St. Paul, Chicago and Kansas City


The
MANN
BOUDOIR CAR

Author's collection.

**FAMILY** relaxed in privacy aboard all-room Mann Boudoir car on cover of this promotional brochure.


September, 1887.

The
MINNESOTA and
NORTHWESTERN R.R.

THE MINNESOTA and NORTHWESTERN Railroad

R. DU PUY
General=Manager

J. A. HANLEY.
Traffic=Manager

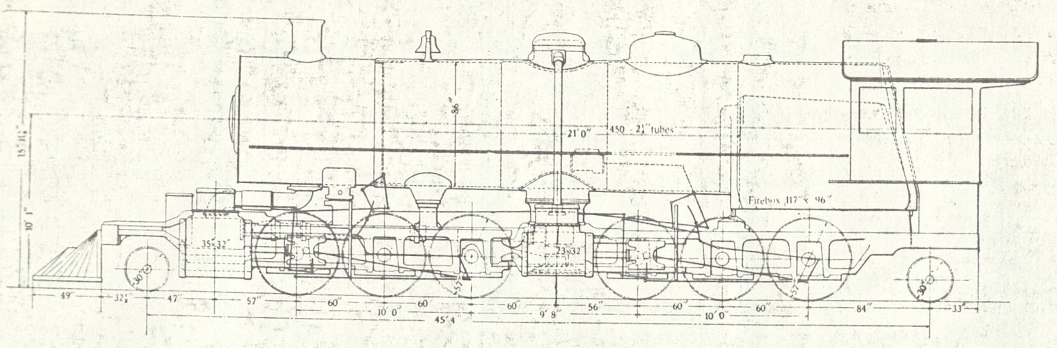
ST. PAUL, MINN.

Matthews, Northrup & Co., Art-Printing Works, Buffalo, N.Y.

Gr

609

THE BALDWIN LOCOMOTIVE WORKS



## Mallet Articulated Locomotive for the Chicago Great Western R. R. Co.

**Railroad Co's Class H-1**

**Baldwin Class 16-$\frac{40}{64}$-¼-DD 23**

**Type 2-6-6-2**

**Code Word, RECULILLAS**

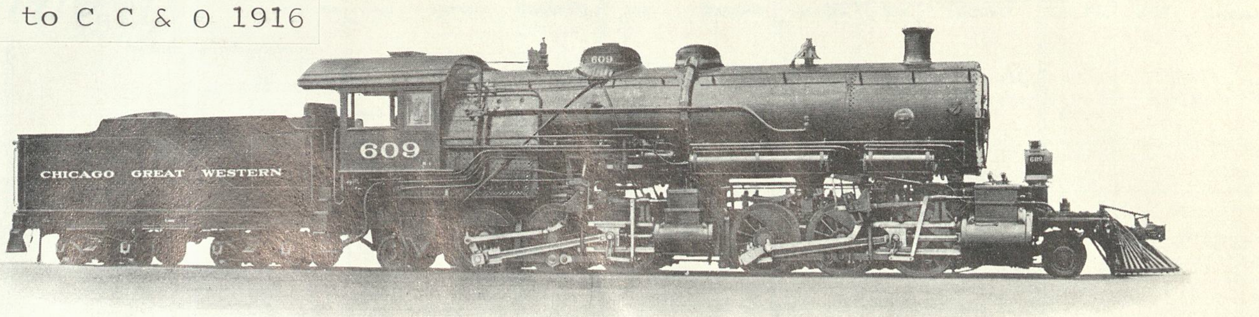
**GENERAL DIMENSIONS**

| | |
|---|---|
| GAUGE | 4′ 8½″ |
| CYLINDERS | 23″ and 35″ x 32″ |
| Valves | Balanced Slide |
| BOILER—Type | Straight |
| Material | Steel |
| Diameter | 86″ |
| Thickness of Sheets | 15⁄16″ |
| Working Pressure | 205 lbs. |
| Fuel | Soft Coal |
| Staying | Radial |
| FIREBOX—Material | Steel |
| Length | 117″ |
| Width | 96″ |
| Depth | front, 77½″; back, 74″ |
| Thickness of Sheets | sides, ⅜″; back, ⅜″; crown, ⅜″; tube, ½″ |
| Water Space, | front, 6″; sides, 5″; back, 5″ |
| TUBES—Material | Steel |
| Thickness | No. 11 W.G. |
| Number | 450 |
| Diameter | 2¼″ |
| Length | 21′ 0″ |
| HEATING SURFACE—Firebox | 226 sq. ft. |
| Tubes | 5540 sq. ft. |
| Total | 5766 sq. ft. |
| Grate Area | 78 sq. ft. |
| DRIVING WHEELS—Diam. Outside | 57″ |
| Diameter of Center | 50″ |
| Journals | 10½″ x 12″ |
| ENGINE TRUCK WHEELS— | |
| Diameter, front | 30″ |
| Journals | 6″ x 12″ |
| Diameter, back | 30″ |
| Journals | 6″ x 12″ |
| WHEEL BASE—Driving | 29′ 8″ |
| Rigid | 10′ 0″ |
| Total Engine | 45′ 4″ |
| Total Engine and Tender | 71′ 11½″ |
| WEIGHT—On Driving Wheels, | 307,000 lbs. |
| On Truck, front | 21,900 lbs. |
| " back | 24,200 lbs. |
| Total Engine | 353,100 lbs. |
| Total Engine and Tender, about | 500,000 lbs. |
| TENDER—Number of Wheels | 8 |
| Diameter of Wheels | 33″ |
| Journals | 5½″ x 10″ |
| Tank Capacity | 8,000 gals. |
| Fuel Capacity | 16 tons |
| SERVICE | Freight |

---

600-609 Baldwin 1910
Class H-1 c/n 35374
Sold to C C & O 1916

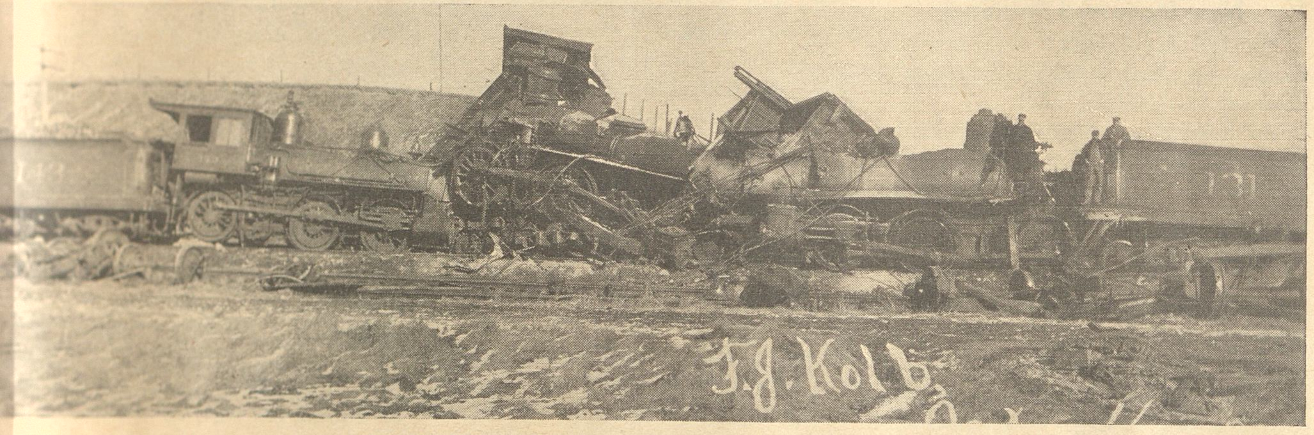
THE BALDWIN LOCOMOTIVE WORKS



## Chicago Great Western Railroad Company

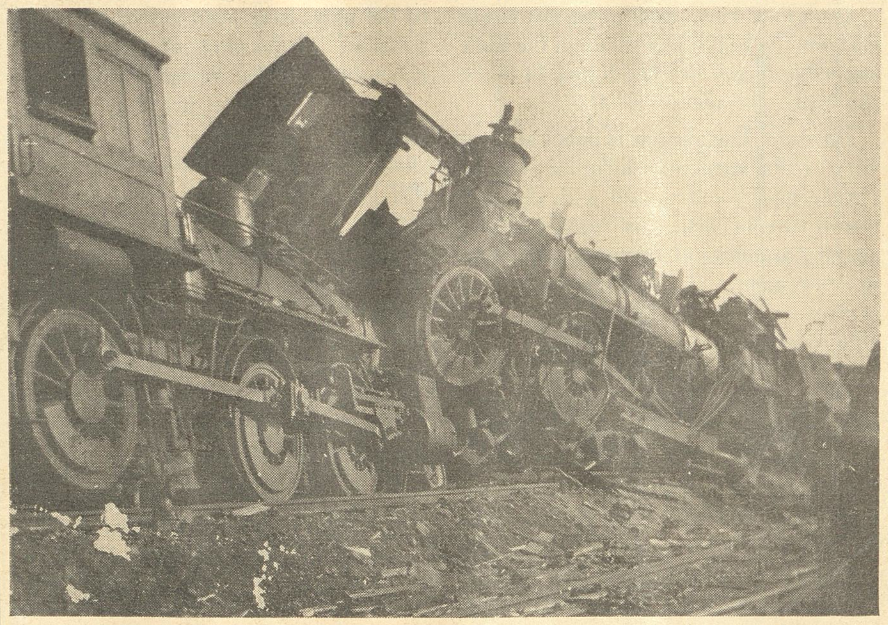
Ten locomotives of the 2-6-6-2 type are in road service on the Chicago Great Western Railroad. These locomotives exert a tractive force of 73,000 pounds working compound. The boiler is of the usual type, without feed-water heater. The general arrangement of the steam piping is like that shown on page 5. Instead of using two frame radius bars, however, as shown in the illustration referred to, a single bar is used on the Chicago Great Western locomotives. This bar is placed under the receiver pipe and the hinge pin is seated in a steel casting which spans the rear frames between the high-pressure cylinders. The center line of the ball joint in the receiver pipe coincides with the center of the hinge pin. The ash pan of this locomotive is so arranged that the hoppers under the drop-plates are placed outside the frames. The pan therefore can easily be emptied, as the fire is dumped directly into the outside hoppers.

---



HEAD-ON COLLISION AT NORTH HANOVER, ILL., IN 1899

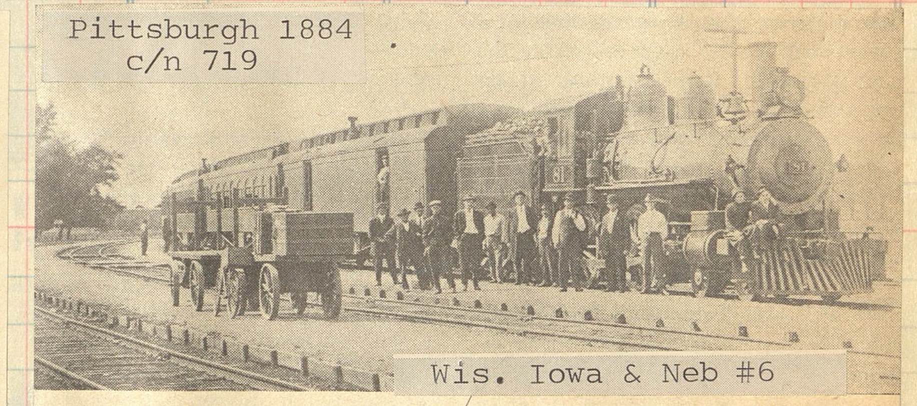
ther William Miller, Div. 576, piloted head engine of double-header on Chicago, Great Western Railroad, eastbound, which stopped to ar switch at North Hanover, Ill. The other train, westbound, with order to meet Brother Miller's train at first station east of North nover, crashed into the standing double-header. Crew of double-header unloaded, but entire engine crew of other train was killed.



AN ENGINE PILE-UP IN THE LATE NINETIES

This wreck occurred on the Chicago, Great Western Railroad in 1898 or 1899 at North Hanover, Ill. Brother Dennis Dugan, retired, Div. 549, was braking at the time on the east-bound train, the crew of which escaped injury. The engineer, fireman and brakeman of the westbound single engine were killed. Photograph was sent in by Brother F. B. Wright, Div. 687.

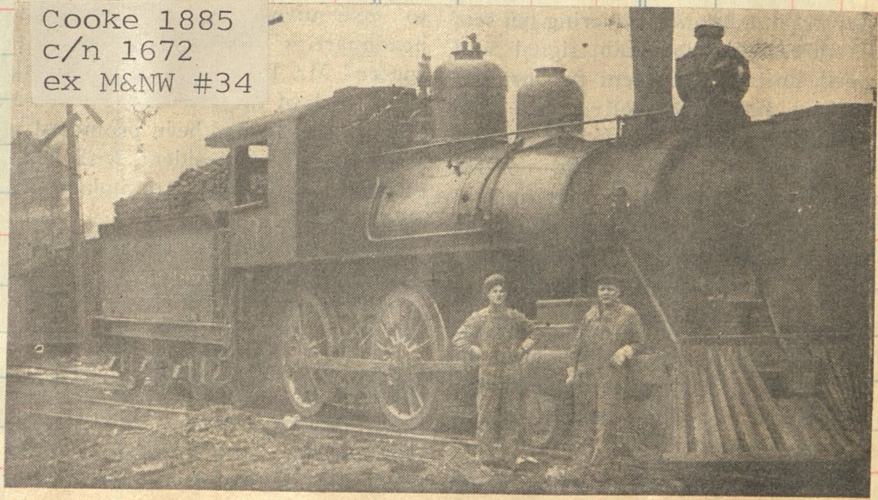
Pittsburgh 1884
c/n 719



Wis. Iowa & Neb #6

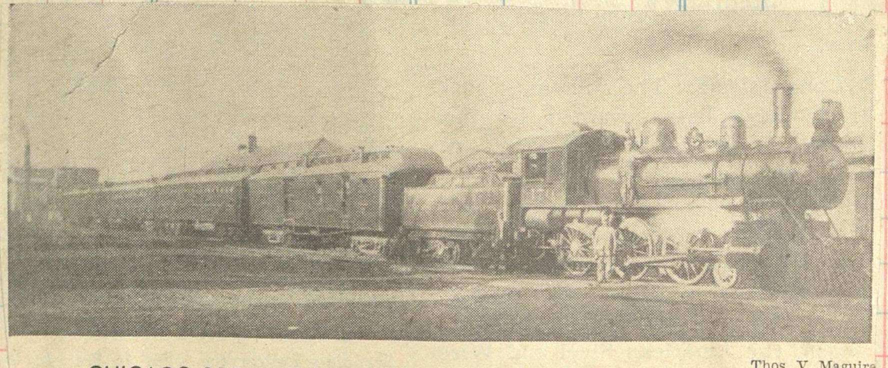
OLD CHICAGO & GREAT WESTERN'S ENGINE 81 AT CLARION, IOWA

Cooke 1885
c/n 1672
ex M&NW #34



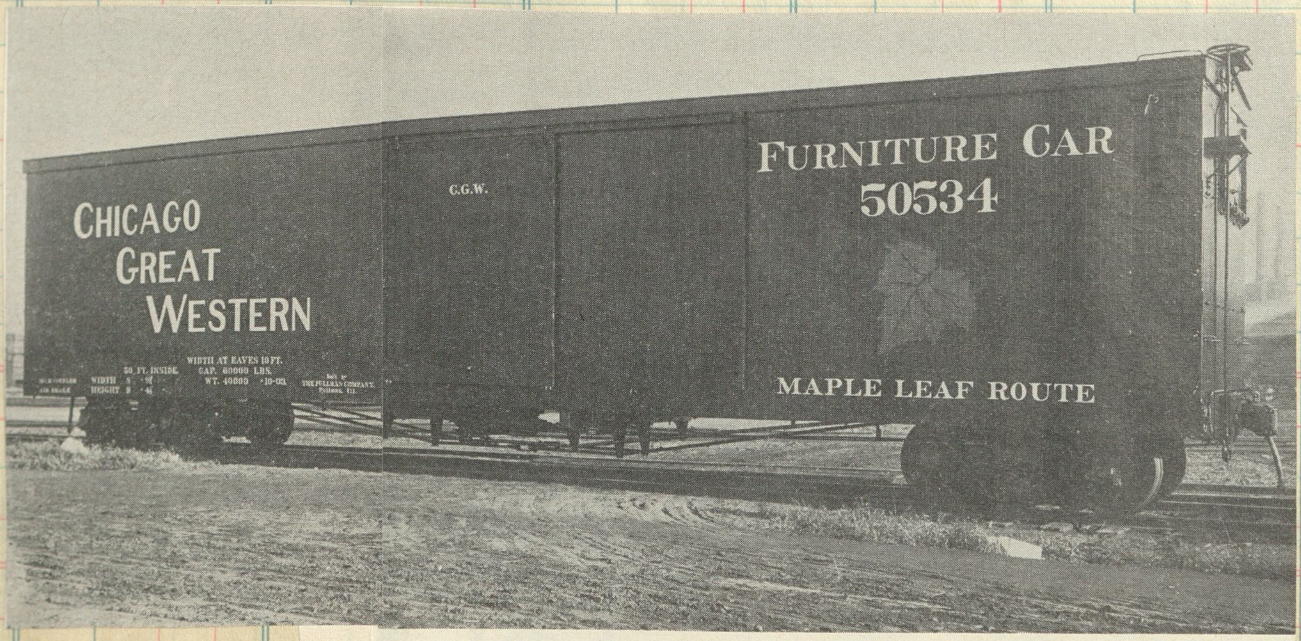
CHICAGO GREAT WESTERN ENGINE 34 IN 1909

170-175
Richmond 1901
c/n 3106



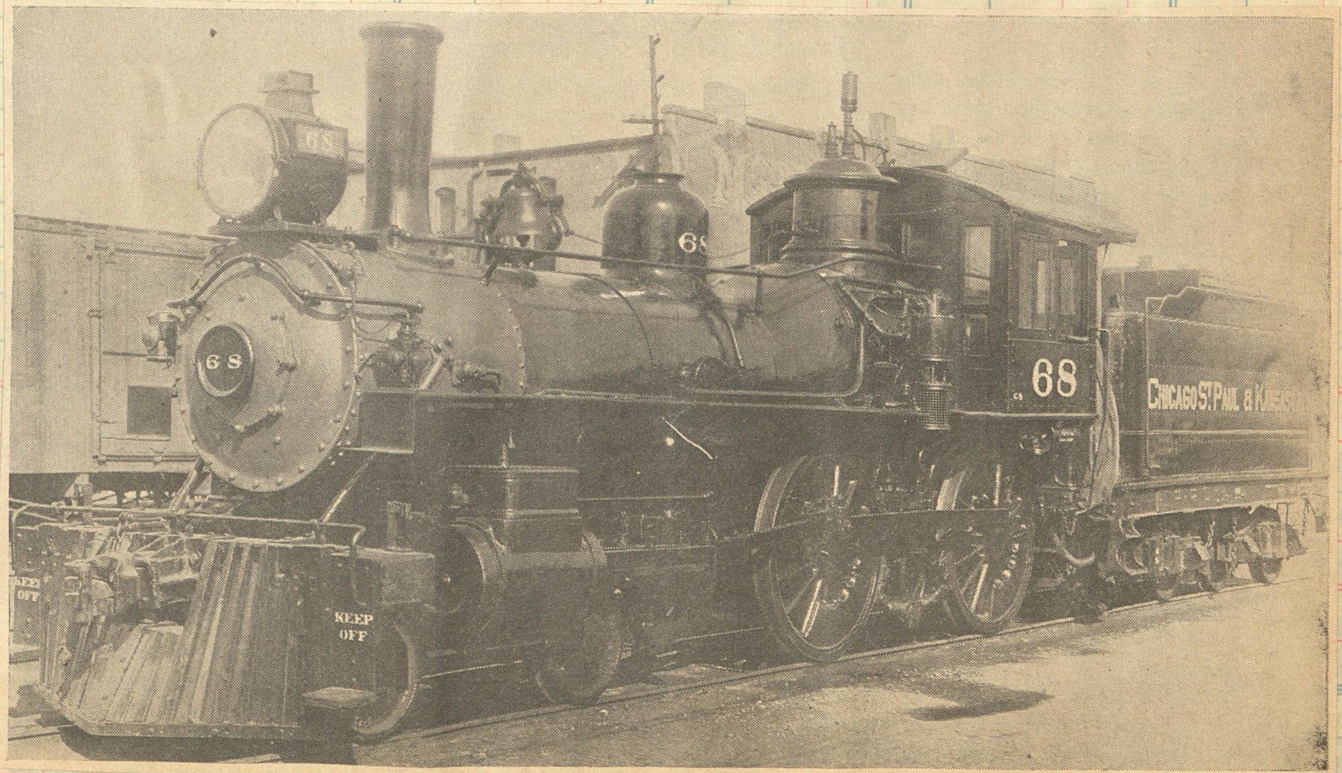
Thos. V. Maguire

CHICAGO GREAT WESTERN'S OLD ENGINE 170 AT ROCHESTER, MINN.

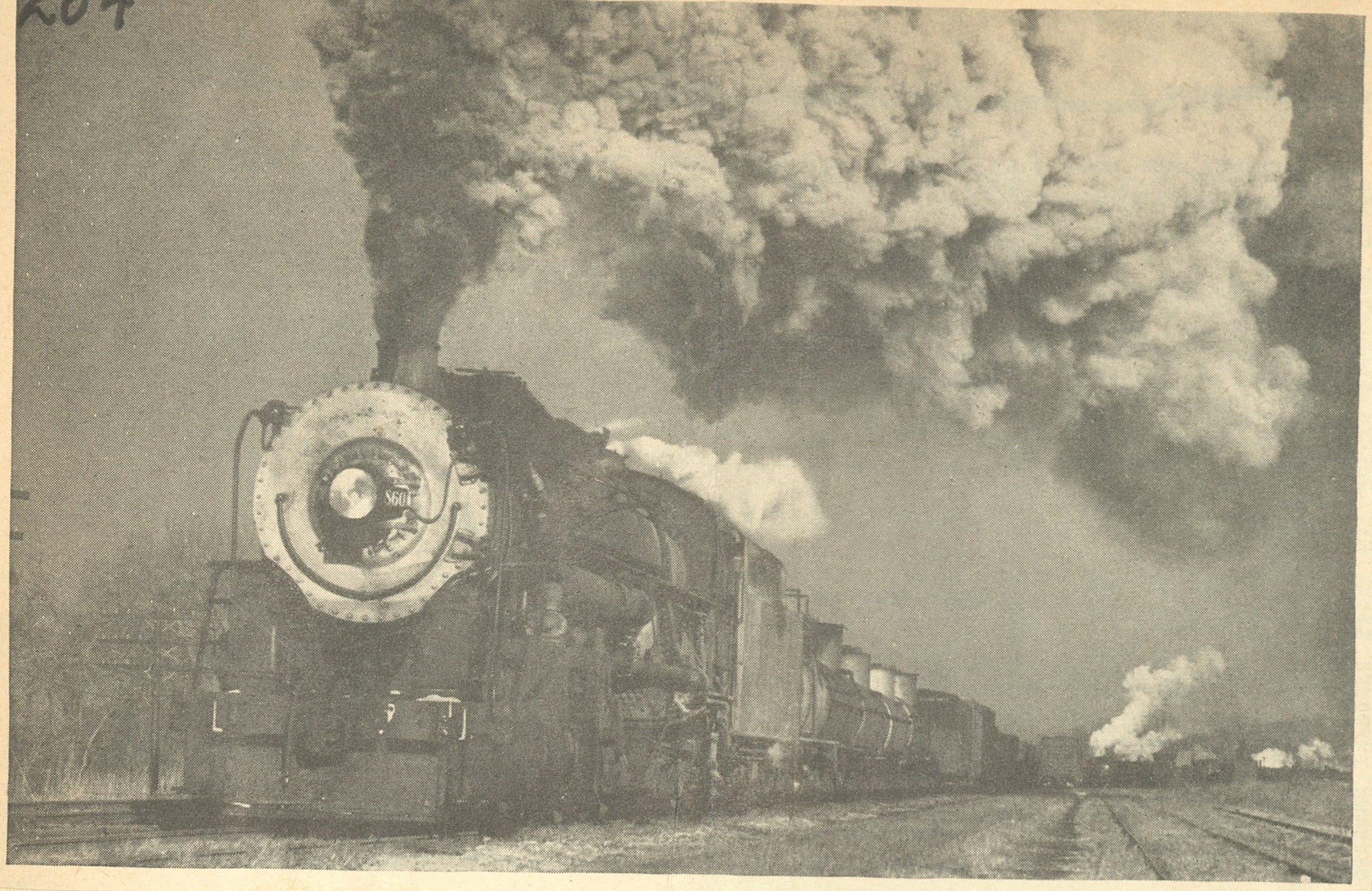


Pullman-Standard

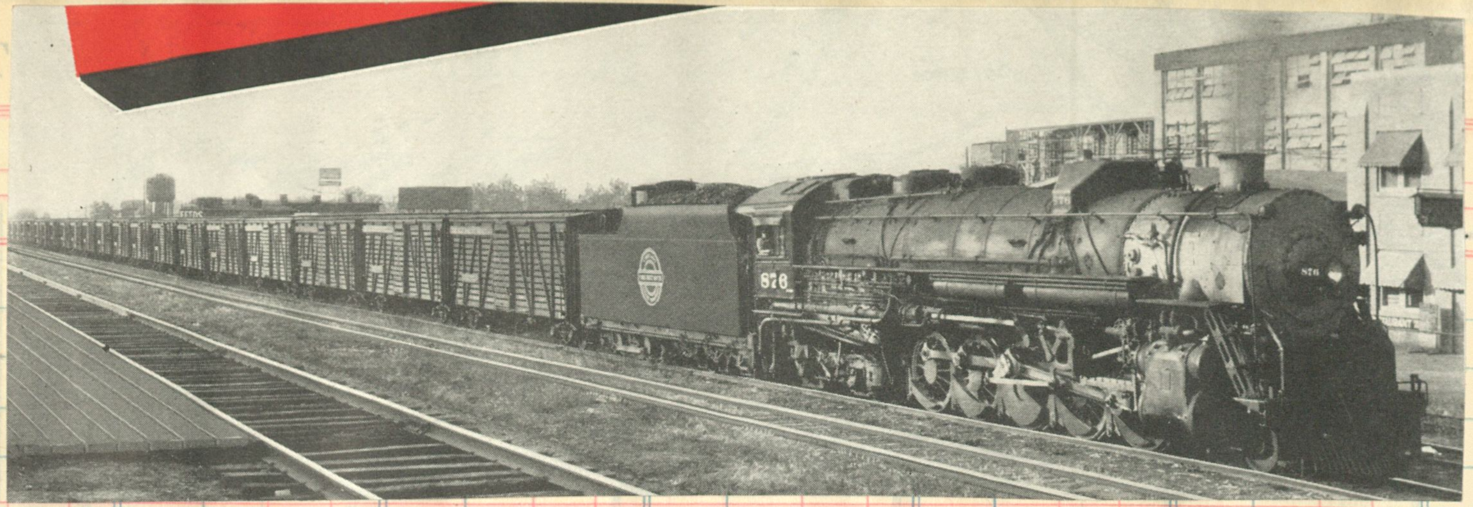
**FURNITURE CAR 50534 touted CGW's Maple Leaf Route slogan in 1903. Wabash ticket agent won a $100 contest for leaf herald design.**

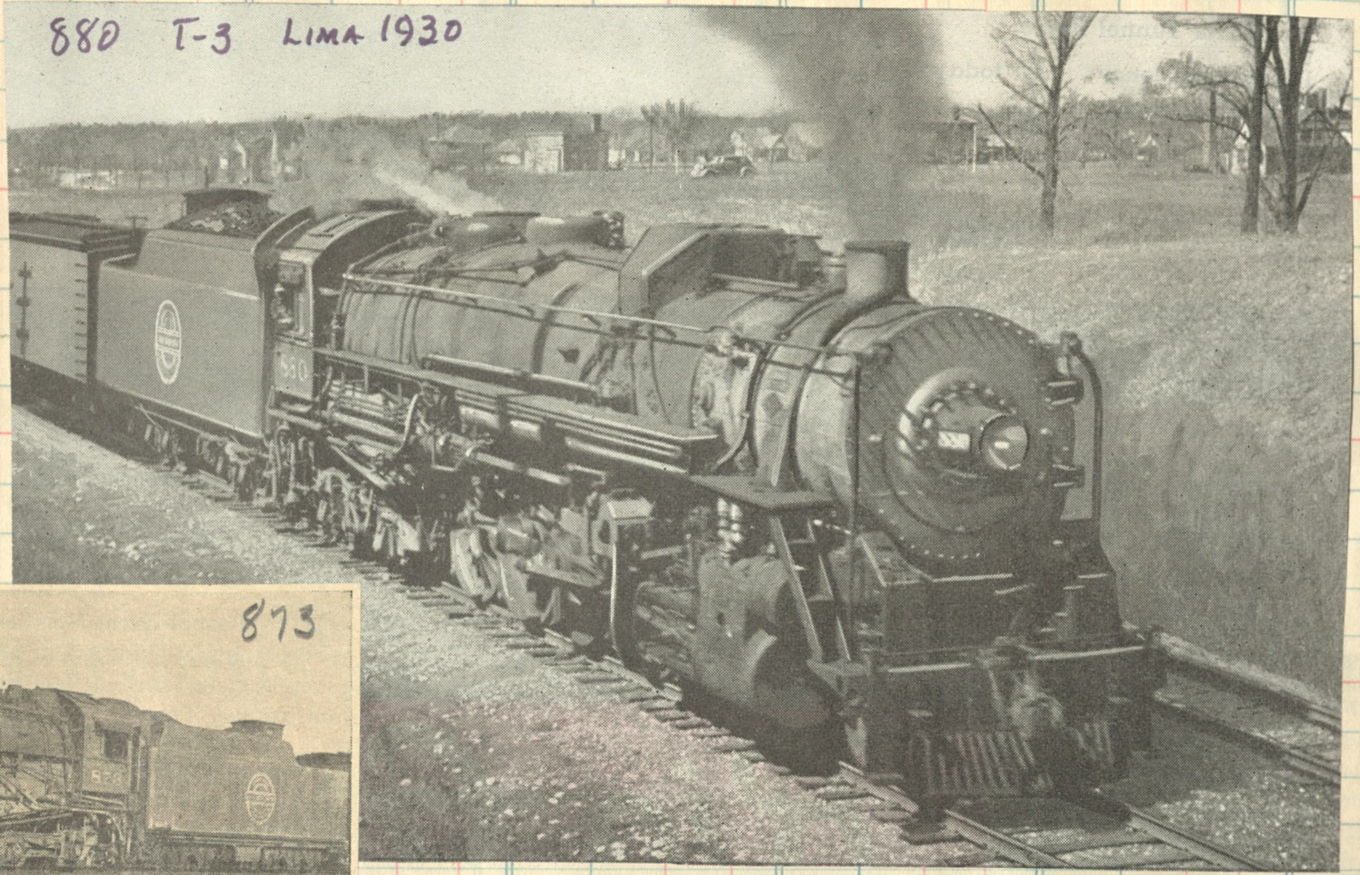


#68 was one of sixteen 4-4-0's built by Cooke in 1888 for the Minnesota & NorthWestern and noed 55-70. Later to CStP&KC and then CGW same numbers. Class C-8, c/n 1817-1832.

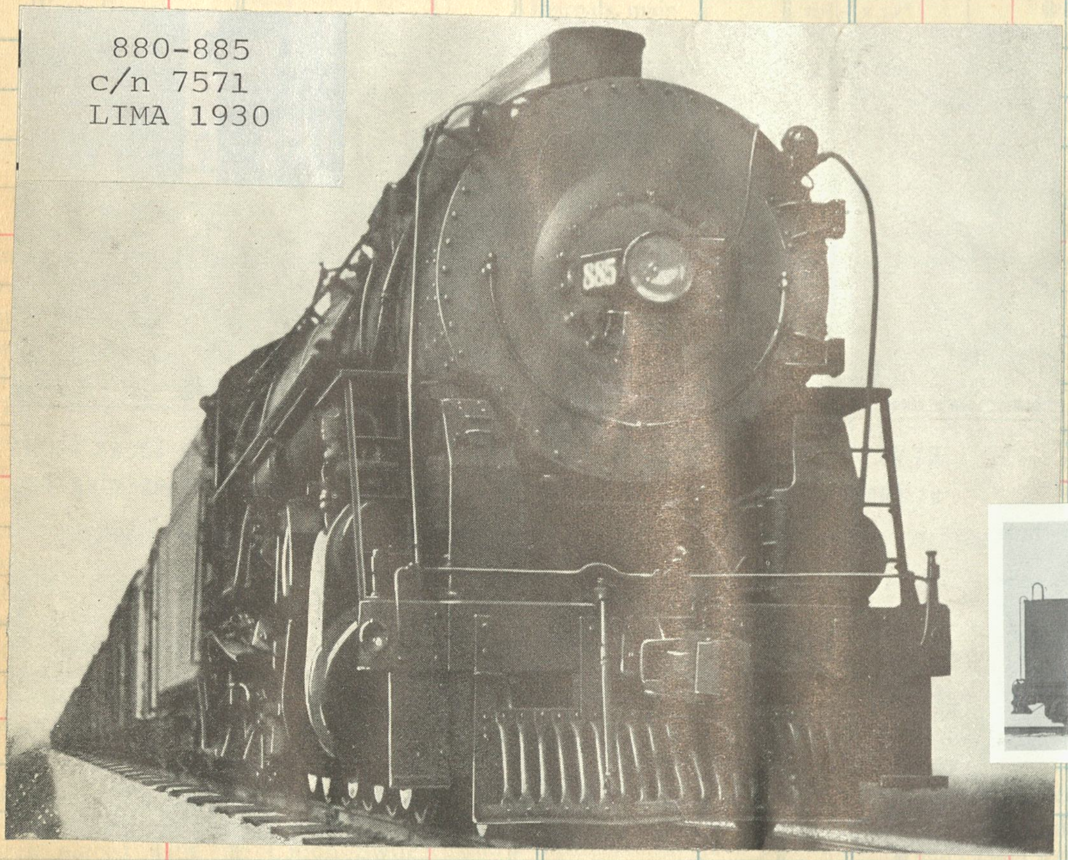


The 860 makes a smokey departure out of StJoe

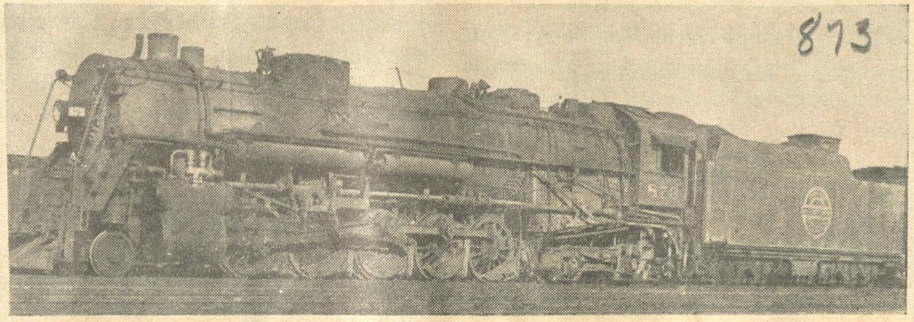




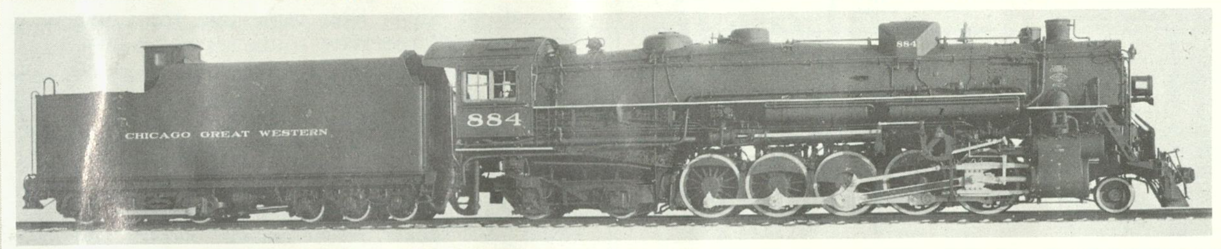
880 T-3 LIMA 1930



880-885
c/n 7571
LIMA 1930



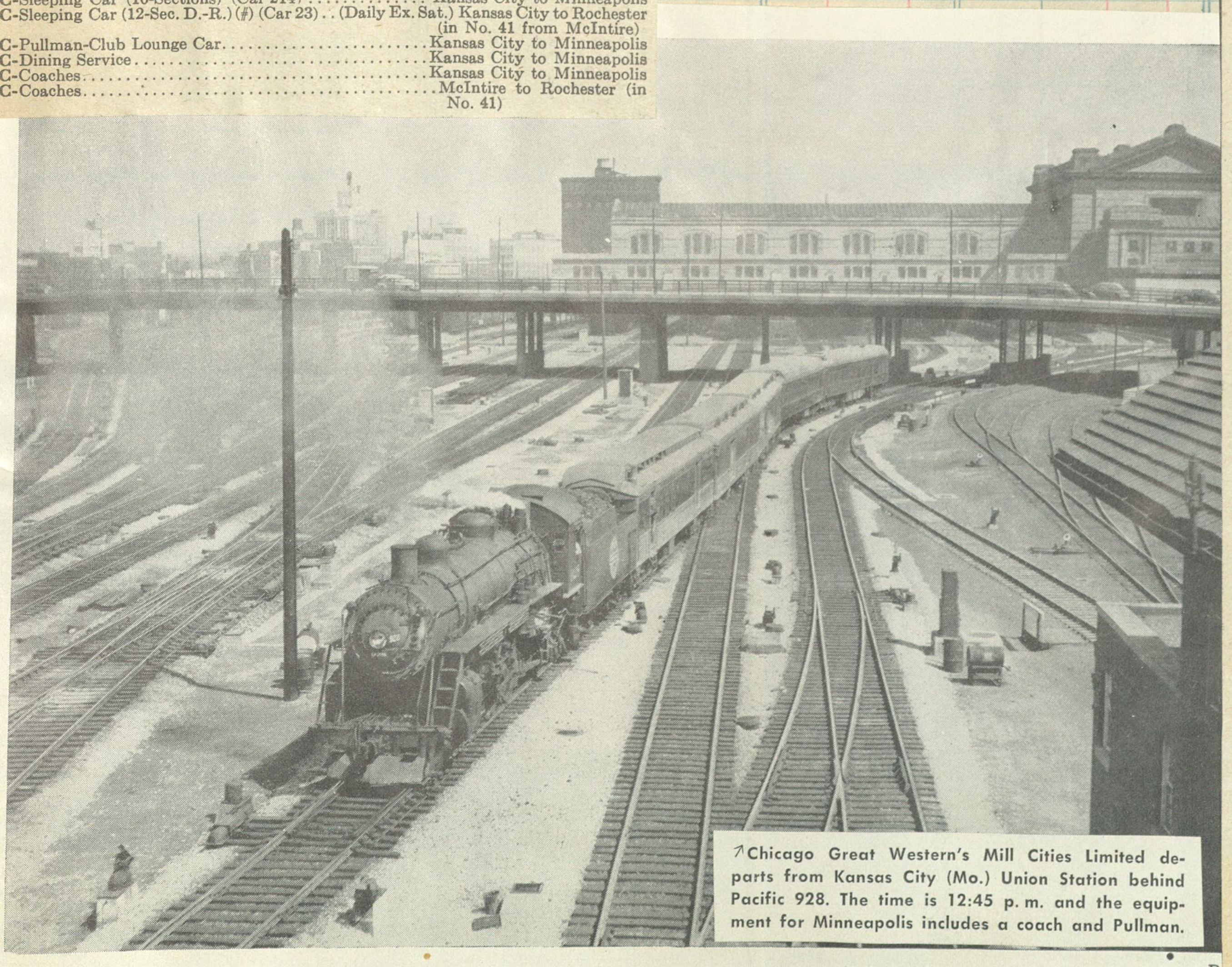
873


CHICAGO GREAT WESTERN
884

NORTHBOUND

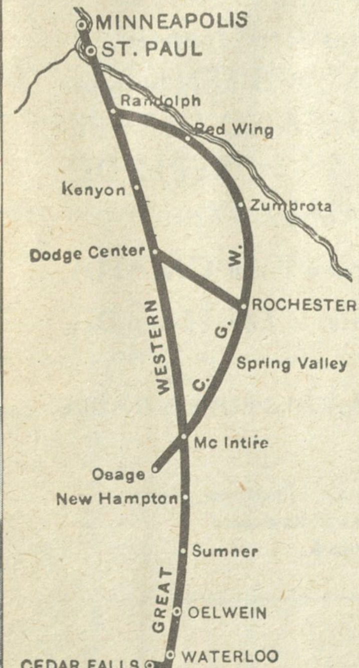
No. 12-23—MILL CITIES LIMITED—DAILY

| | |
|---|---|
| AC-Sleeping Car (10-Sections) (Car 214) | Kansas City to Minneapolis |
| AC-Sleeping Car (12-Sec. D.-R.) (#) (Car 23) | (Daily Ex. Sat.) Kansas City to Rochester (in No. 41 from McIntire) |
| AC-Pullman-Club Lounge Car | Kansas City to Minneapolis |
| AC-Dining Service | Kansas City to Minneapolis |
| AC-Coaches | Kansas City to Minneapolis |
| AC-Coaches | McIntire to Rochester (in No. 41) |



↗Chicago Great Western's Mill Cities Limited departs from Kansas City (Mo.) Union Station behind Pacific 928. The time is 12:45 p. m. and the equipment for Minneapolis includes a coach and Pullman.

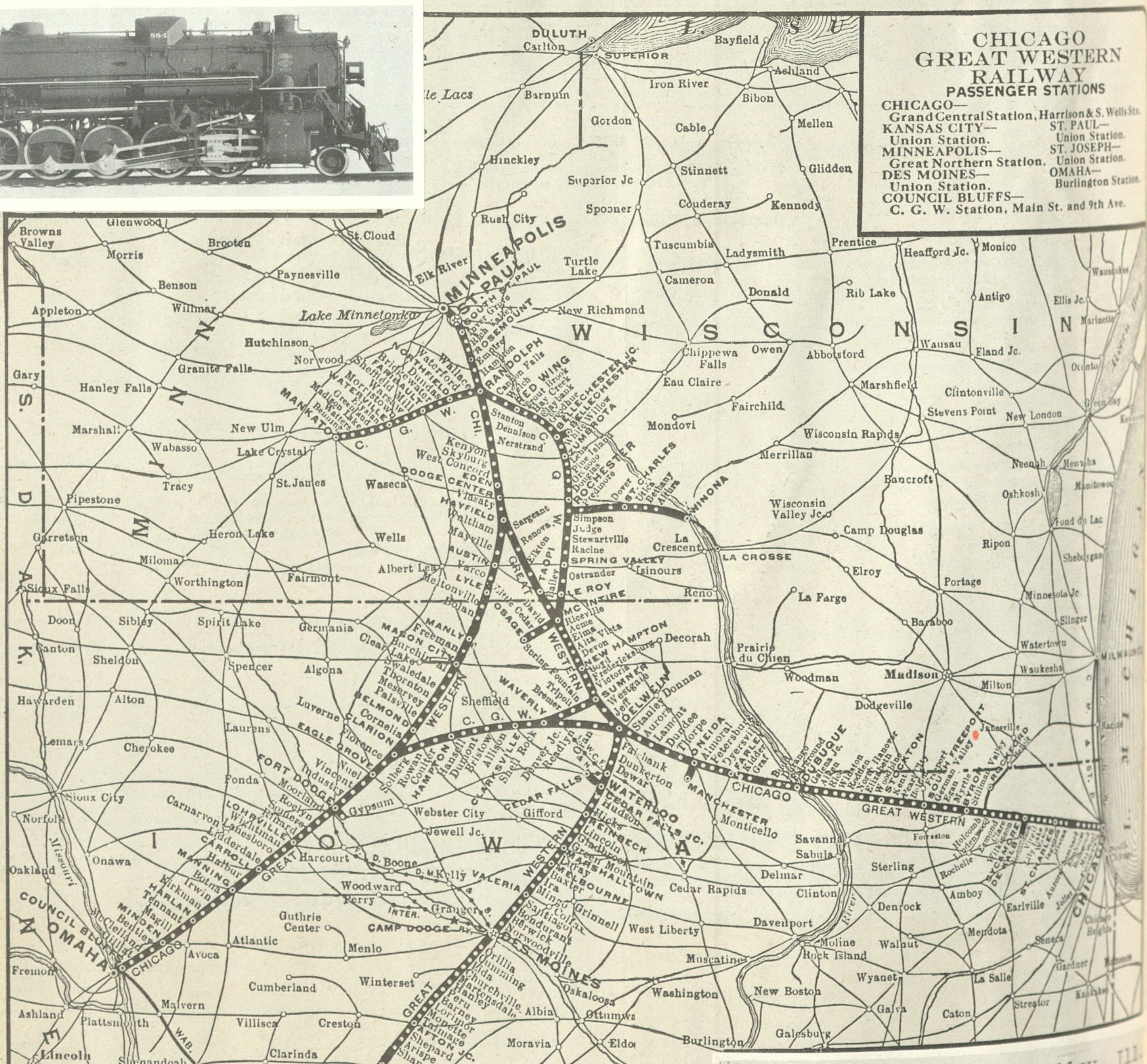
*Mill Cities Limited*


MINNEAPOLIS
ST. PAUL
Randolph
Red Wing
Kenyon
Zumbrota
Dodge Center
ROCHESTER
Spring Valley
Mc Intire
Osage
New Hampton
Sumner
OELWEIN
CEDAR FALLS
WATERLOO
Reinbeck
Marshalltown
DES MOINES
Afton Jc.
Diagonal
Conception
ST. JOSEPH
Leavenworth
KANSAS CITY
Missouri River
CHICAGO GREAT WESTERN
C. G. W.

6271

for general all 'round comfort, speed, riding ease and dependability, there is no better train between . . . . . .

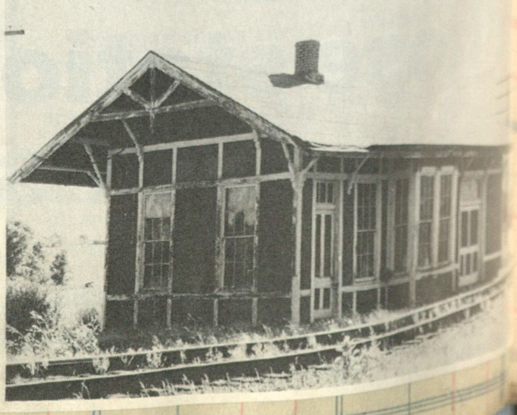
Minneapolis
St. Paul
Rochester
Des Moines
St. Joseph
Kansas City


W I S C O N S I N
I O W A
M I S S O U R I
KAN.
NEB.
MINNEAPOLIS
ST. PAUL
CHICAGO
KANSAS CITY, MO.
OMAHA
DES MOINES
5256
POOLE BROS. CHICAGO.

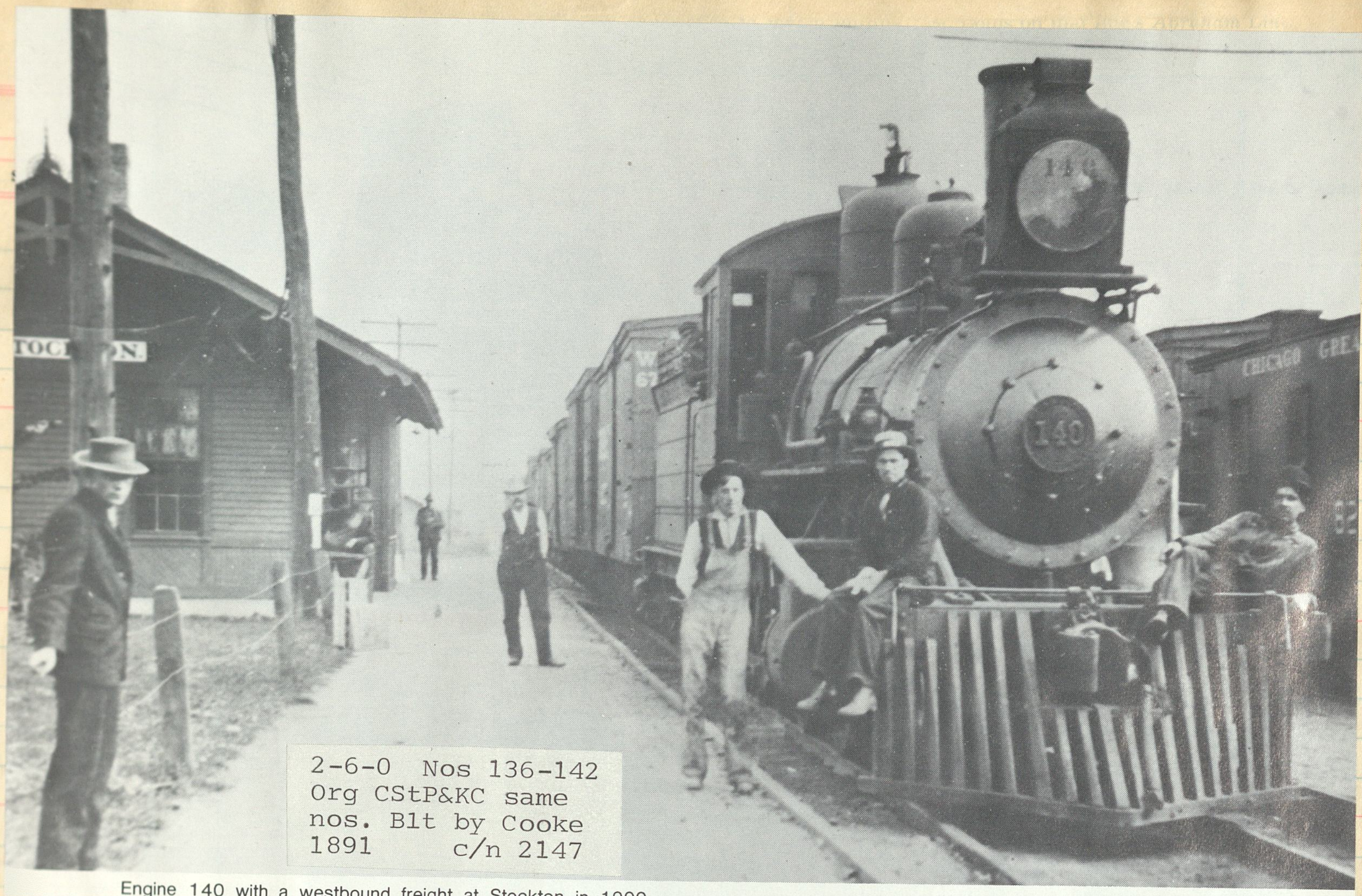
CHICAGO
GREAT WESTERN
RAILWAY
PASSENGER STATIONS

CHICAGO—
Grand Central Station, Harrison & S. Wells Sts.
KANSAS CITY—
Union Station.
MINNEAPOLIS—
Great Northern Station.
DES MOINES—
Union Station.
COUNCIL BLUFFS—
C. G. W. Station, Main St. and 9th Ave.
ST. PAUL—
Union Station.
ST. JOSEPH—
Union Station.
OMAHA—
Burlington Station.

German Valley, Ill



205

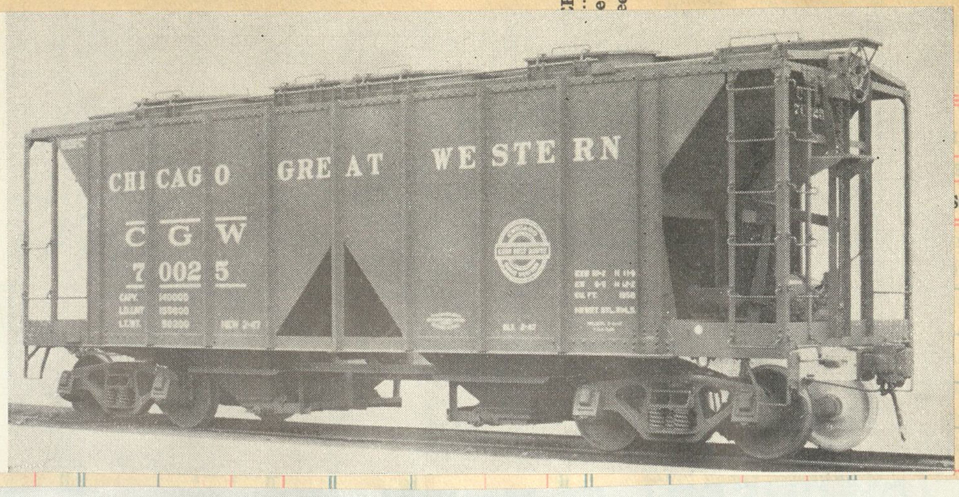

STOCKTON
14
140
CHICAGO GREAT

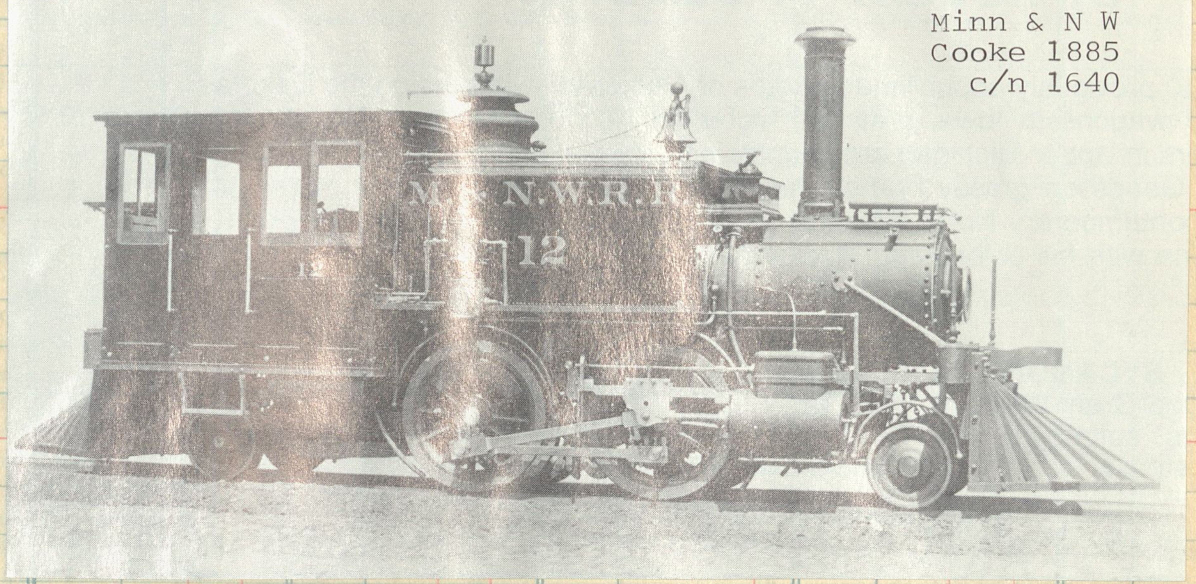
2-6-0 Nos 136-142
Org CStP&KC same
nos. Blt by Cooke
1891 c/n 2147

Engine 140 with a westbound freight at Stockton in 1900.

**Chicago Great Western 70-ton welded covered hopper car. Builder, Pullman-Standard Car Manufacturing Co.**

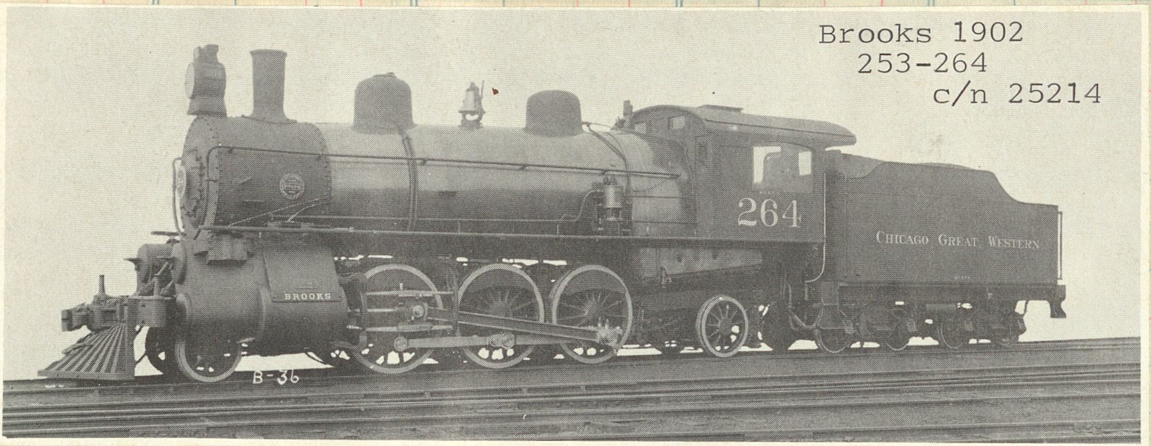
Light weight 50,200 lb.; load limit 159,800 lb.; capacity 1,958 cu. ft.; inside length 29 ft. 3 in.; width 9 ft. 5 in.


CHICAGO GREAT WESTERN
CGW
70025

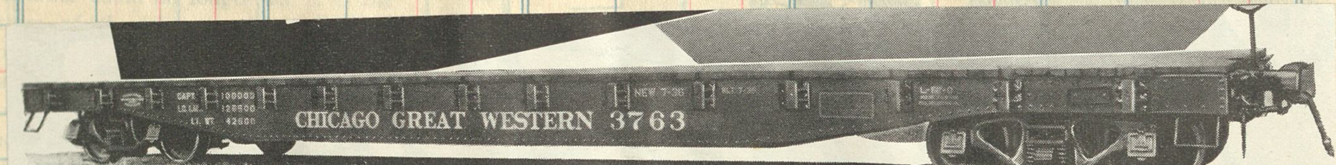


Minn & N W
Cooke 1885
c/n 1640

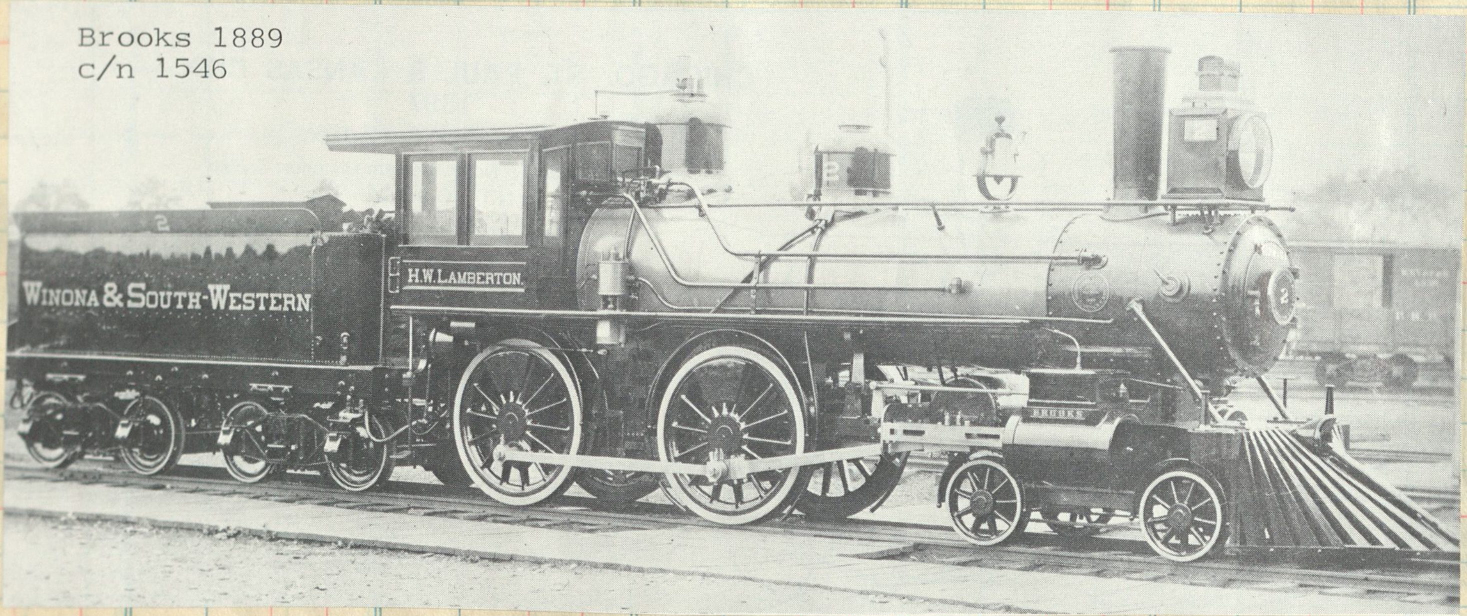
See next page


264
CHICAGO GREAT WESTERN
BROOKS
B-36

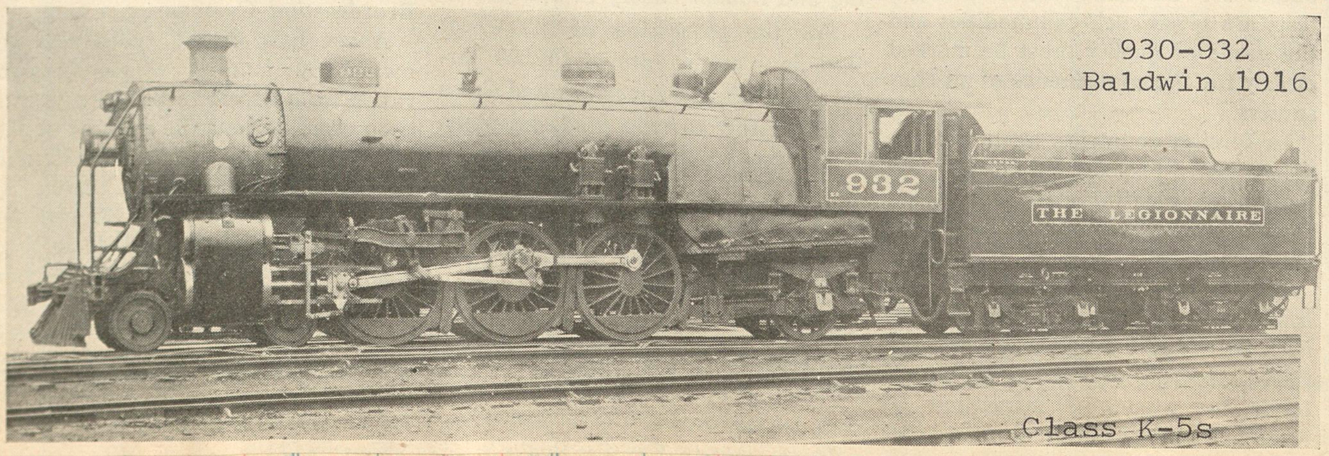
Brooks 1902
253-264
c/n 25214


CHICAGO GREAT WESTERN 3763

Pullman 1936

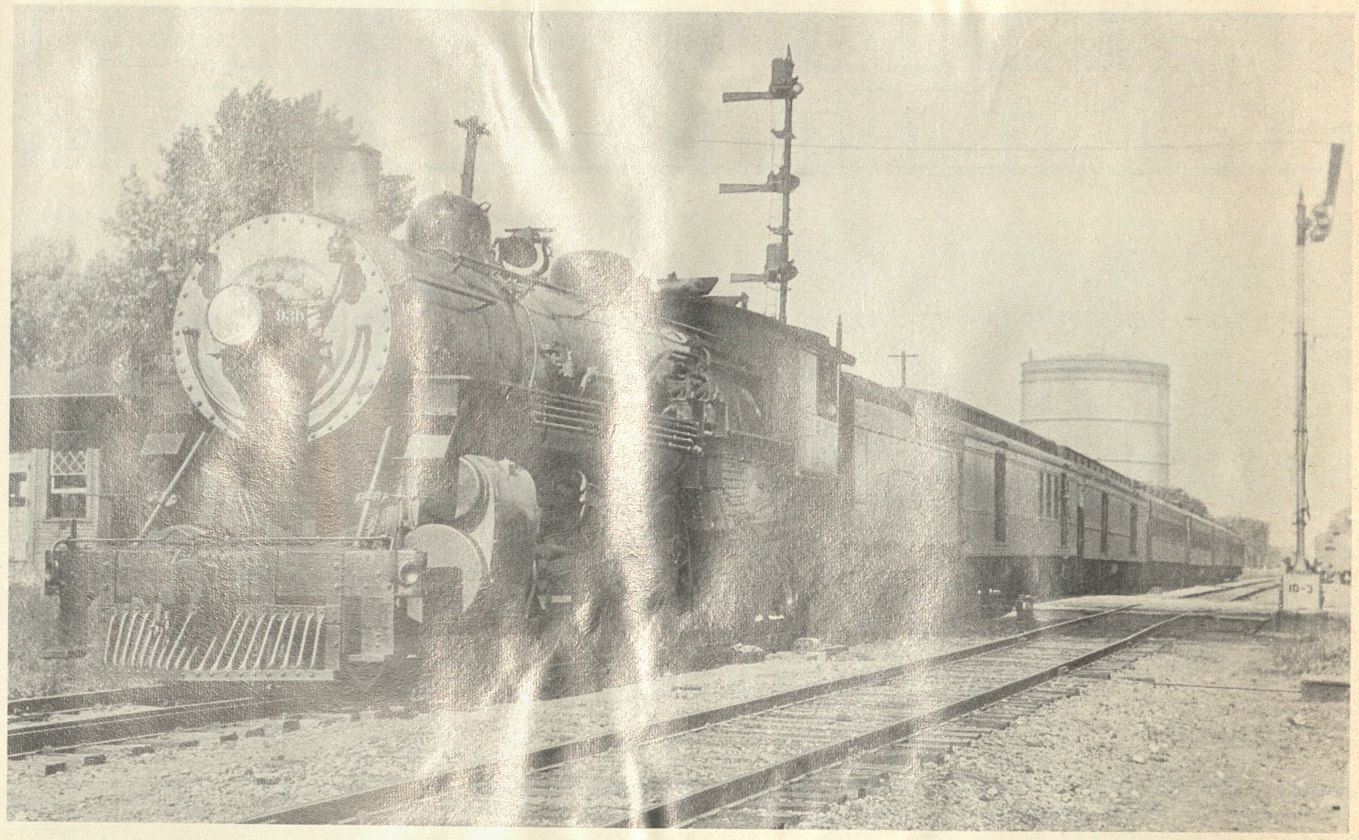

WINONA & SOUTH-WESTERN
H.W. LAMBERTON.
BROOKS

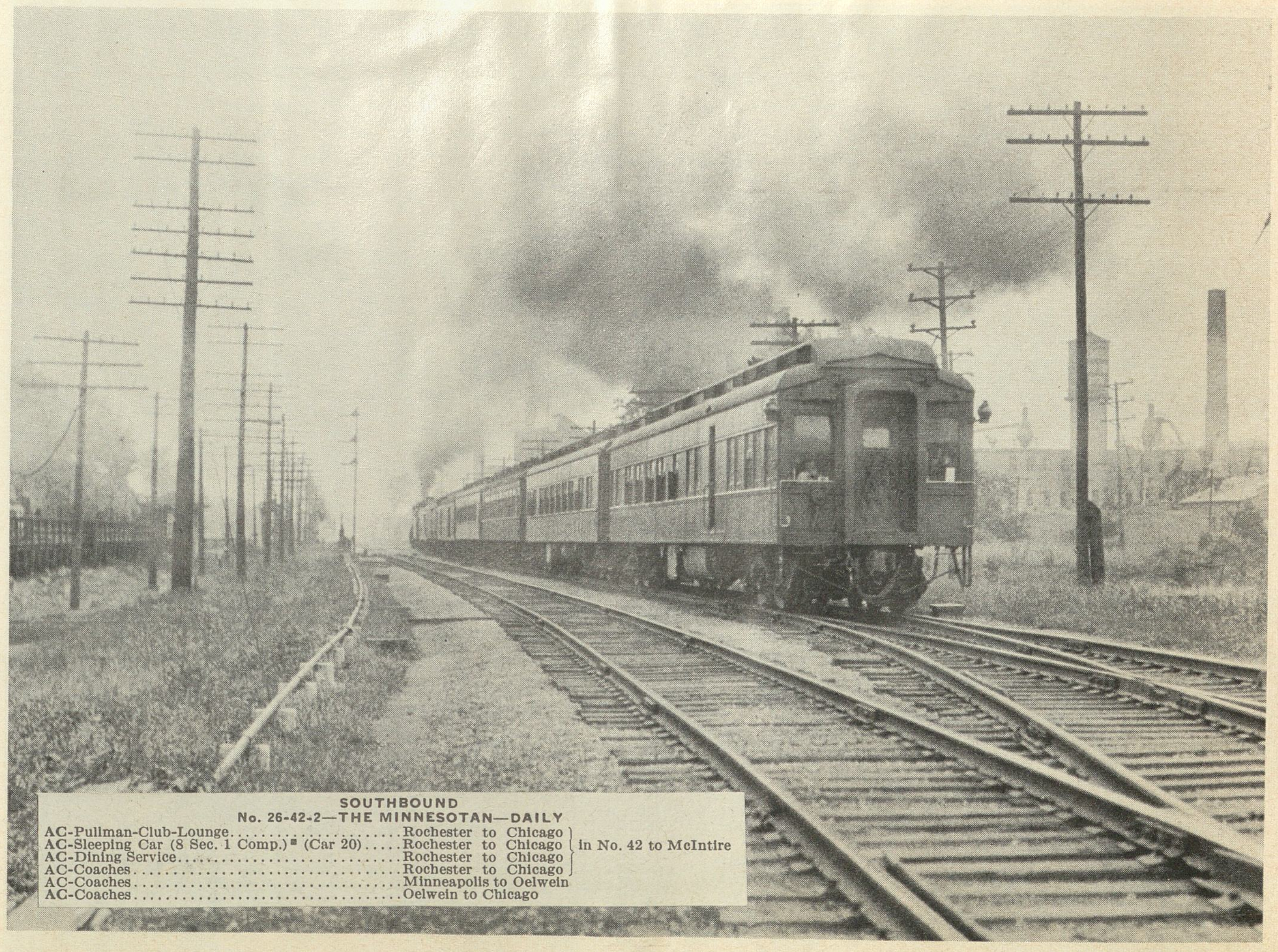
Brooks 1889
c/n 1546


932
THE LEGIONNAIRE

930-932
Baldwin 1916

Class K-5s





SOUTHBOUND
No. 26-42-2—THE MINNESOTAN—DAILY

| | | |
|---|---|---|
| AC-Pullman-Club-Lounge | Rochester to Chicago | in No. 42 to McIntire |
| AC-Sleeping Car (8 Sec. 1 Comp.)■ (Car 20) | Rochester to Chicago | |
| AC-Dining Service | Rochester to Chicago | |
| AC-Coaches | Rochester to Chicago | |
| AC-Coaches | Minneapolis to Oelwein | |
| AC-Coaches | Oelwein to Chicago | |

Both photos, A. W. Johnson.

**COMING AND GOING:** The Minnesotan departs Forest Park, Ill., in the summer of 1934 with Pacific No. 930 on the point and Pullman restaurant-sleeper Old Elm Club carrying the markers. A fascinated youth occupies the "railfan's seat" at the rear.

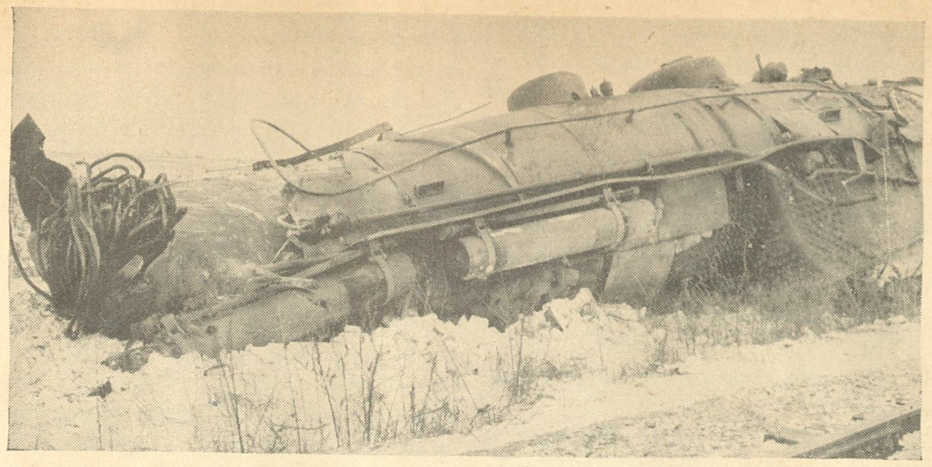
## Boiler Explosions

To the Editor:

During recent years there have been several very interesting articles in our JOURNAL regarding boilers and their care.

Our attention has also been directed to the fact that there have been fewer boiler explosions during the past few years, which we are all glad to know is true.

Although there has been a great improvement along this line, we must not relax our efforts to still further remove this terrible danger which exists as long as we have any explosions at all.



" . . . THROUGH AN ACCIDENT LIKE THIS WE MUST LEARN AND IMPROVE . . . "
The 877 of the Chicago Great Western Railroad after her boiler exploded.

I am thoroughly convinced boiler explosions can be almost entirely done away with after seeing what was done on the Chicago Great Western Railroad in the past three years under Superintendent T. Olson, in charge of the motive power department. Having worked in engine service 35 years under many different mechanical officers and seeing the performance of the locomotives change with each change of officers, I think I can say that in order to have a safe boiler you must have a man in charge of the mechanical department who has had something more than just a college education. Mr. Olson was raised from the ranks, from engine service, where he both fired and ran a locomotive, so he thoroughly understood what was expected of the engine crew as well as the locomotive.

You have here some pictures of engine 877, or rather what was the 877, before the explosion, which totally wrecked this locomotive about 4 a.m., January 28, 1938, one mile west of Melbourne, Iowa.

The 877 was one of our new 2-10-4 types, weighing about 400 tons and was one of the largest in service in this part of the country. It cost about $115,000.

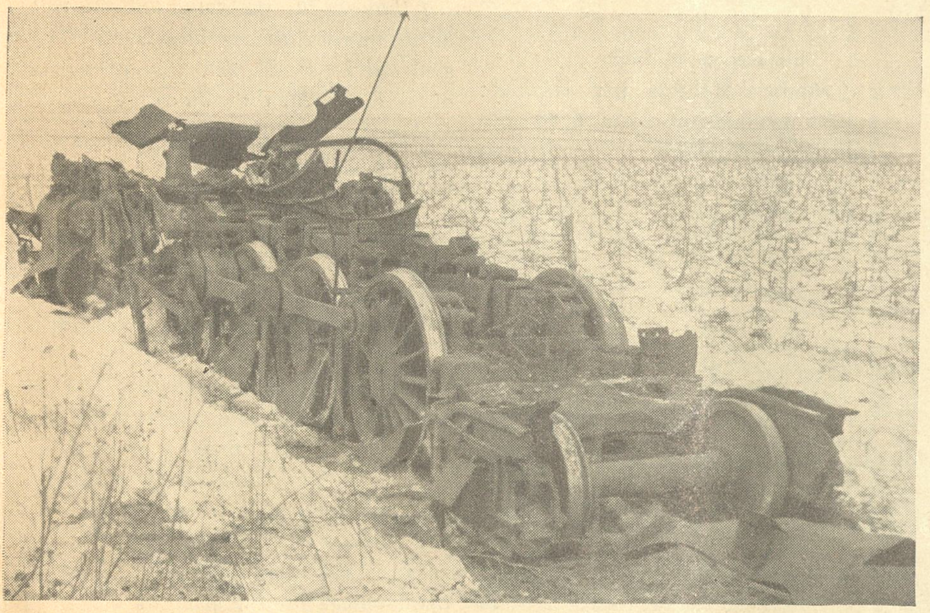
Brother Frank Holmes, the engineer, his fireman and head brakeman, lost their lives in this wreck. The explosion was heard for ten miles distant, waking people up for many miles and scattering wreckage over 15 acres on each side of the track.

This locomotive was equipped with non-lifting injectors situated outside the cab, with no tell-tale or warning pipe in the cab, so it was impossible to tell if the injectors were working or not. Nearly all our locomotives were equipped with low water alarms, but this one was not. The men in charge were responsible men and Brother Holmes was considered by the officers, as well as the men with whom he worked to be one of the best engineers we had.

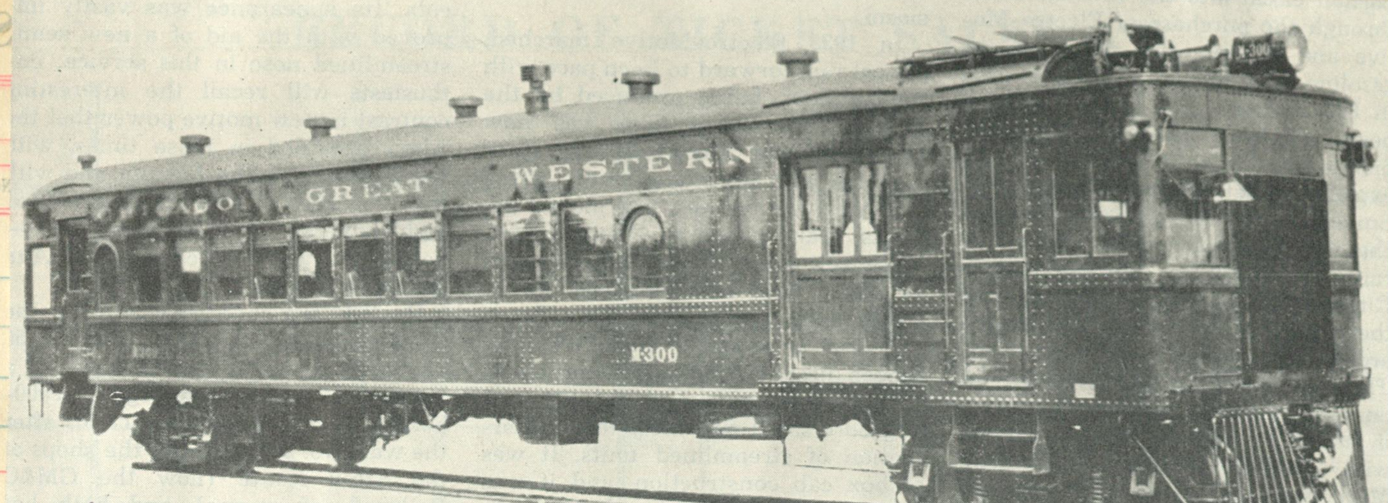
While it was a terrible price to pay, I can say Frank Holmes did not die in vain. It is through an accident like this that we must learn and improve, which certainly has been done on this railroad and can be done on other roads as well.

FRANK H. ANDERSON, S.-T., Div. 778,
936 Creston Avenue,
Des Moines, Iowa.

May 1941 issue of Locomotive Engineers Journal

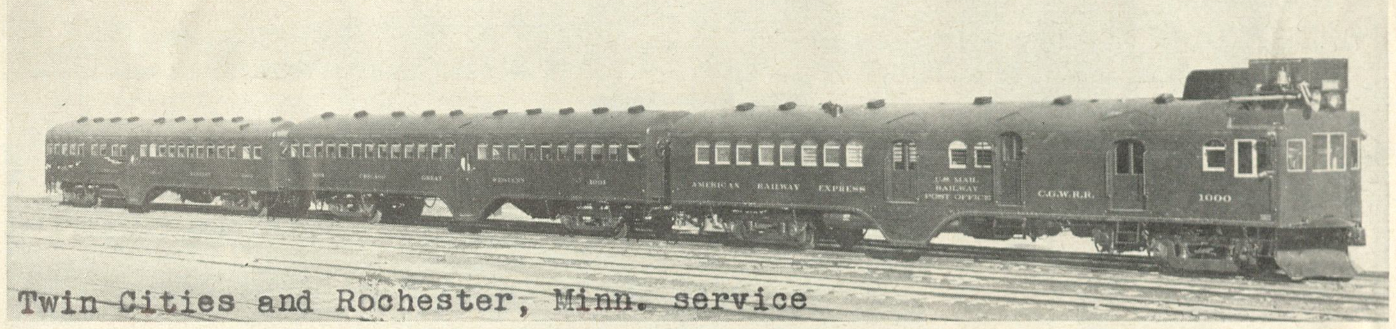


BLOWN INTO CORNFIELD AFTER BOILER EXPLODES
Drivers and trucks of the once 877, new 2-10-4 type of the C. G. W. The boiler of this 400 ton locomotive exploded about a mile west of Melbourne, Iowa, January 28, 1938



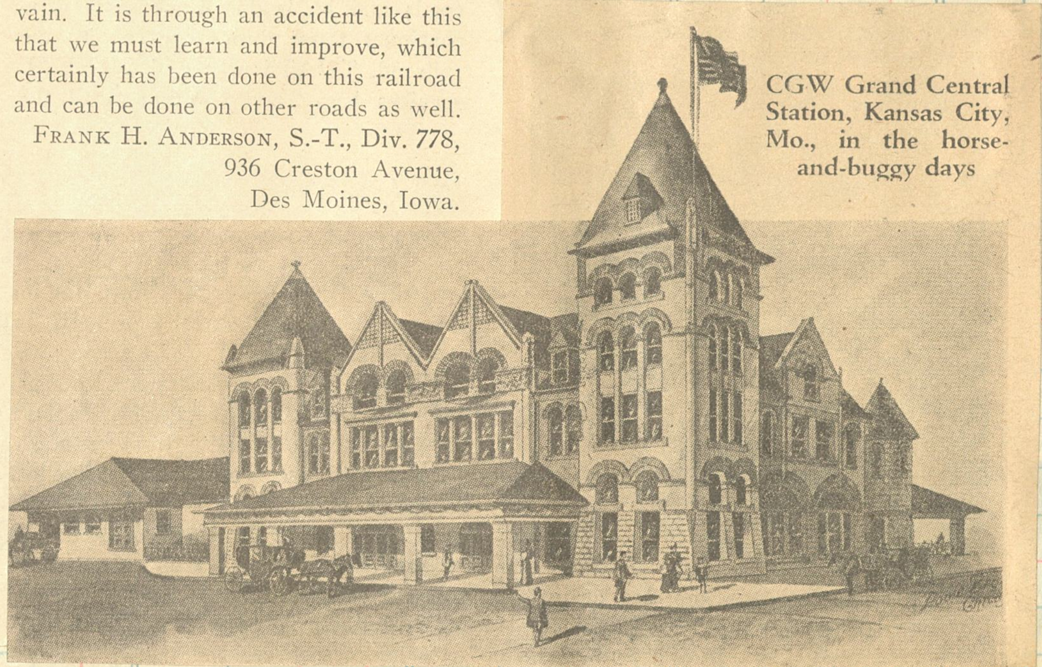
L 60'3"

ELECTRO-MOTIVE 1924    DESTROYED BY FIRE - DUMONT, IA 2/28/30

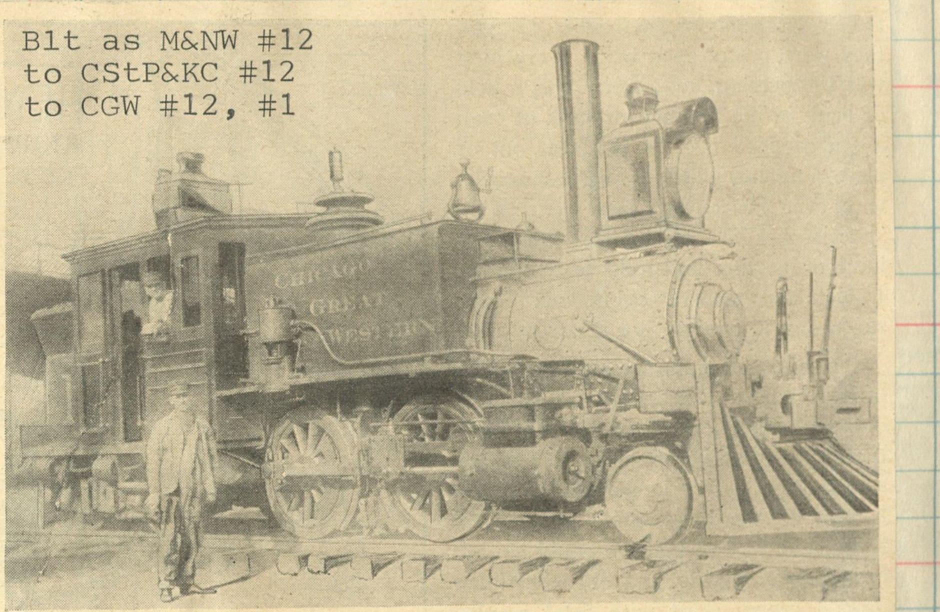


the "Red Bird"

Twin Cities and Rochester, Minn. service

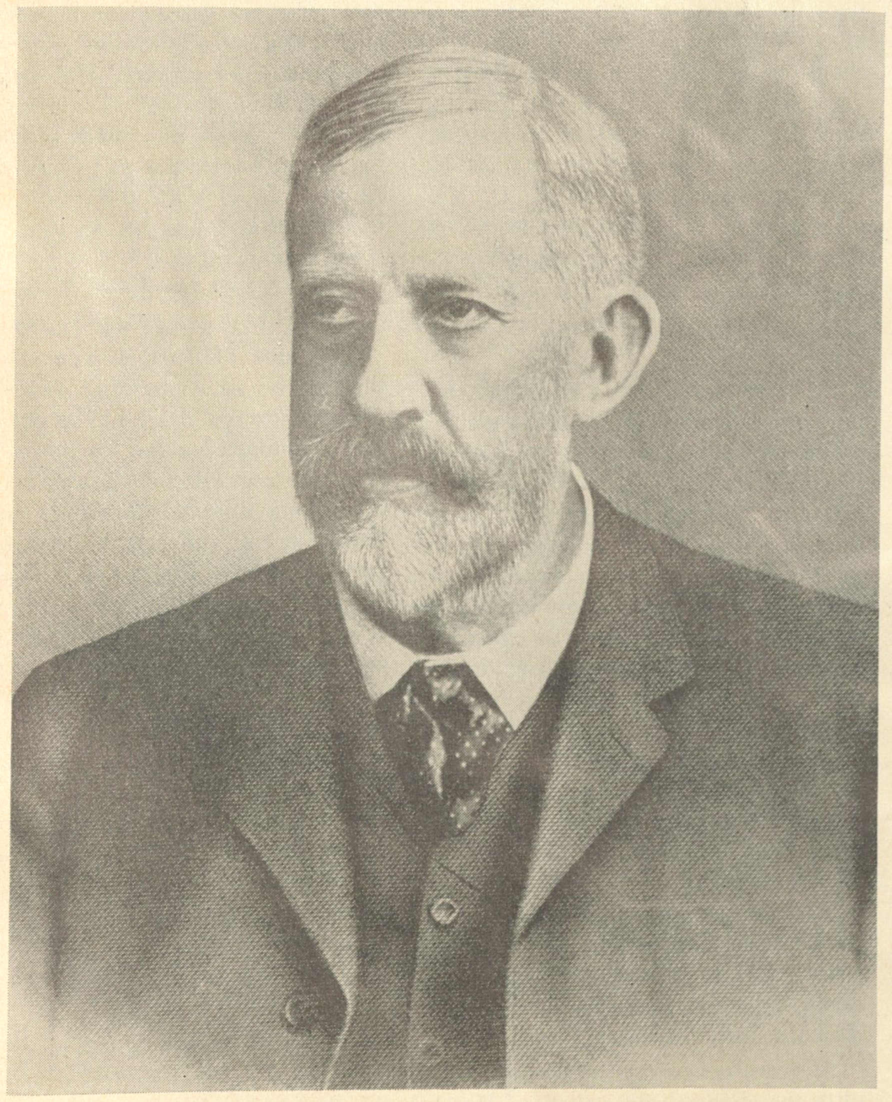


CGW Grand Central Station, Kansas City, Mo., in the horse-and-buggy days



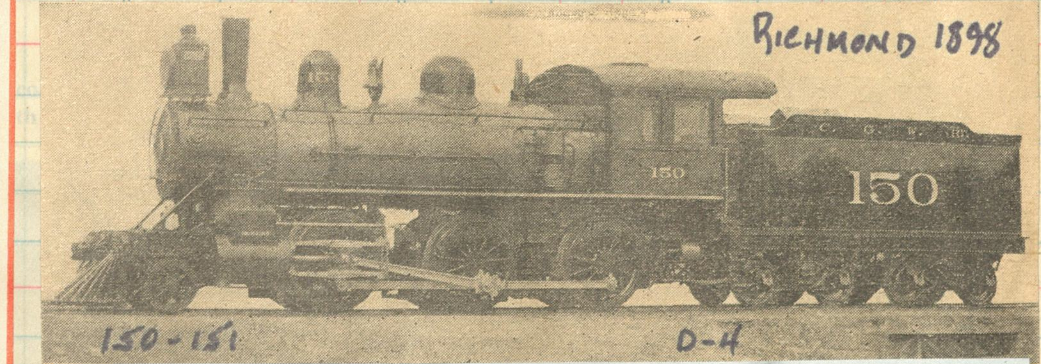
Blt as M&NW #12
to CStP&KC #12
to CGW #12, #1

LOCOMOTIVE I OF THE CHICAGO GREAT WESTERN RAILROAD
This picture was taken in St. Paul, Minn., at the roundhouse near the Robert Street Bridge,



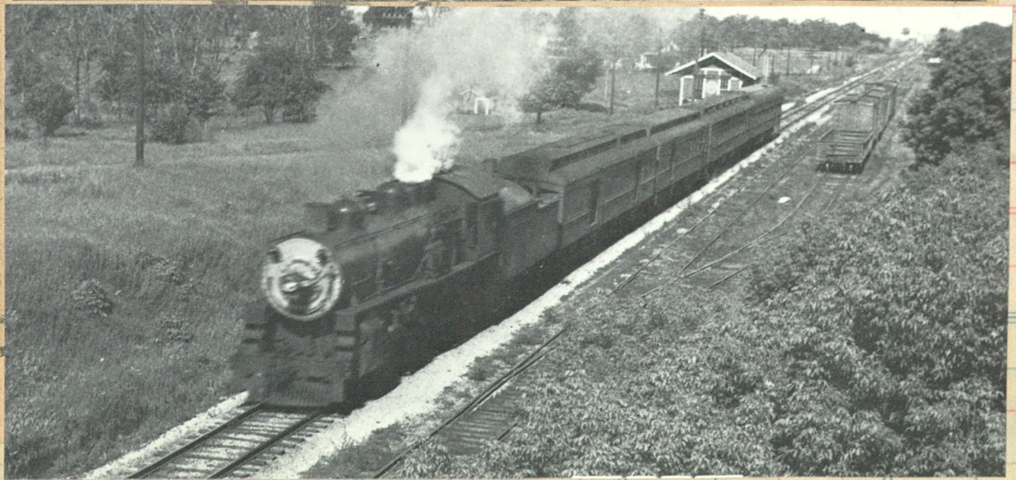
President 1883-1909

*His constant fight against discriminatory rates didn't win CGW President A. B. Stickney many friends among the railroad presidents of his time, but his progressive ideas have played an important role in railroad history*



RICHMOND 1898

150-151    D-4



Southbound Minnesotan at Ingalton, Ill.

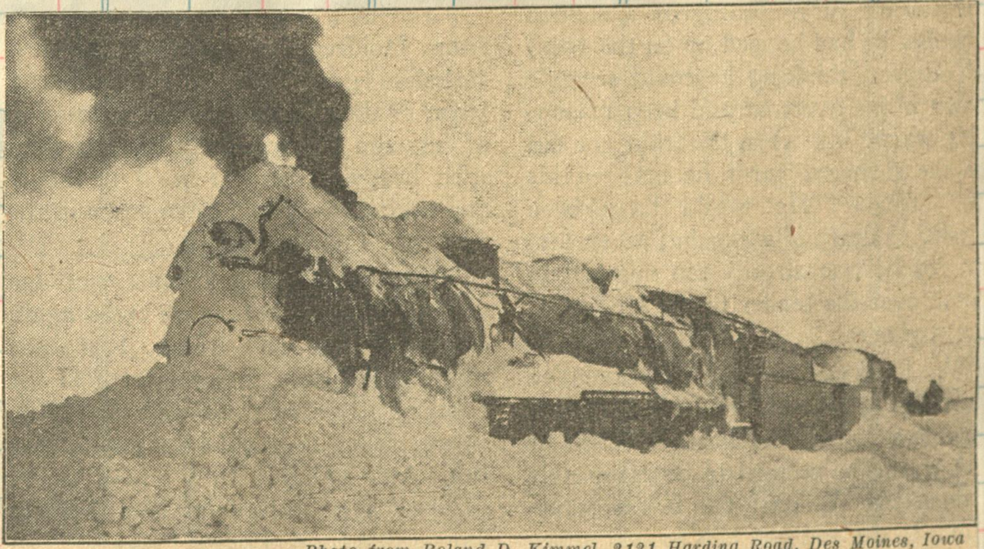
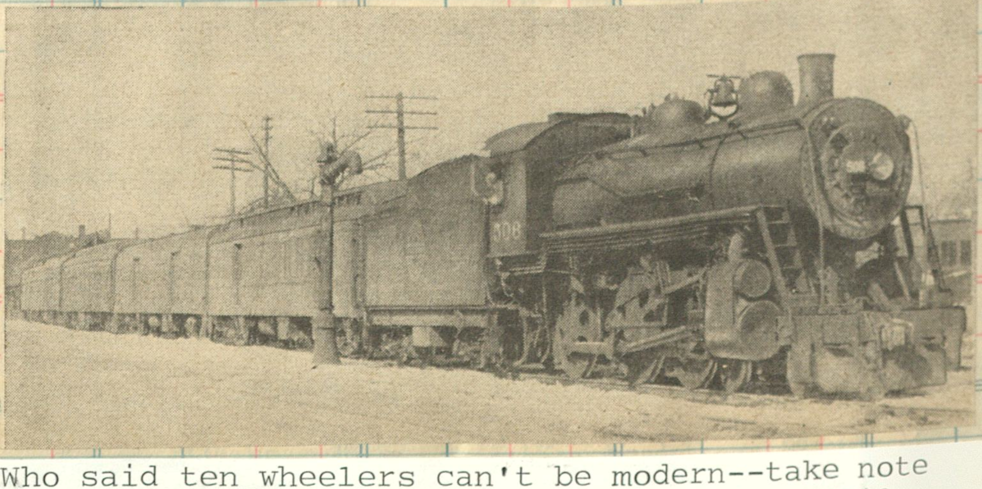


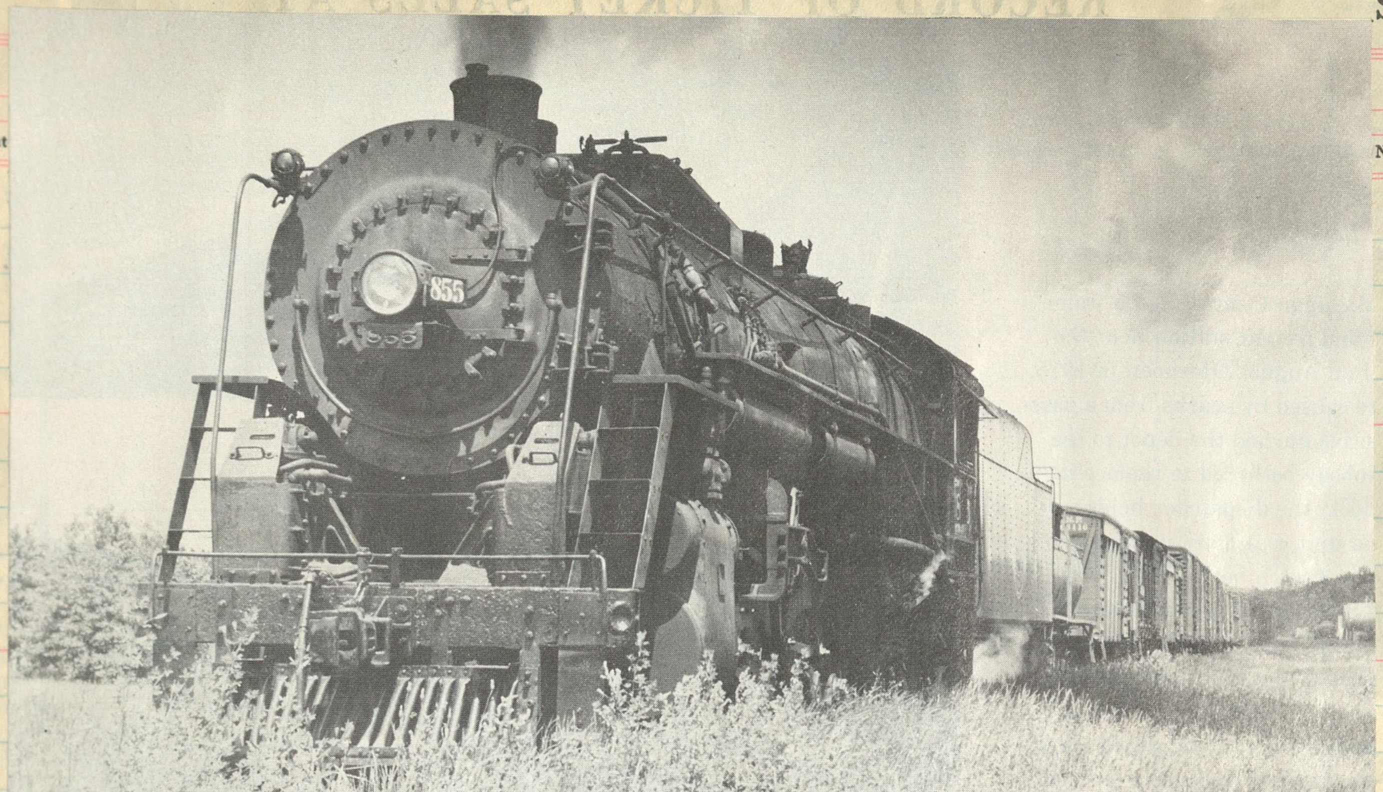
*Photo from Roland D. Kimmel, 2121 Harding Road, Des Moines, Iowa*

Iowa had a particularly heavy blizzard in February, 1936, as you can see from this unusual shot of a Chicago Great Western train trapped by snow

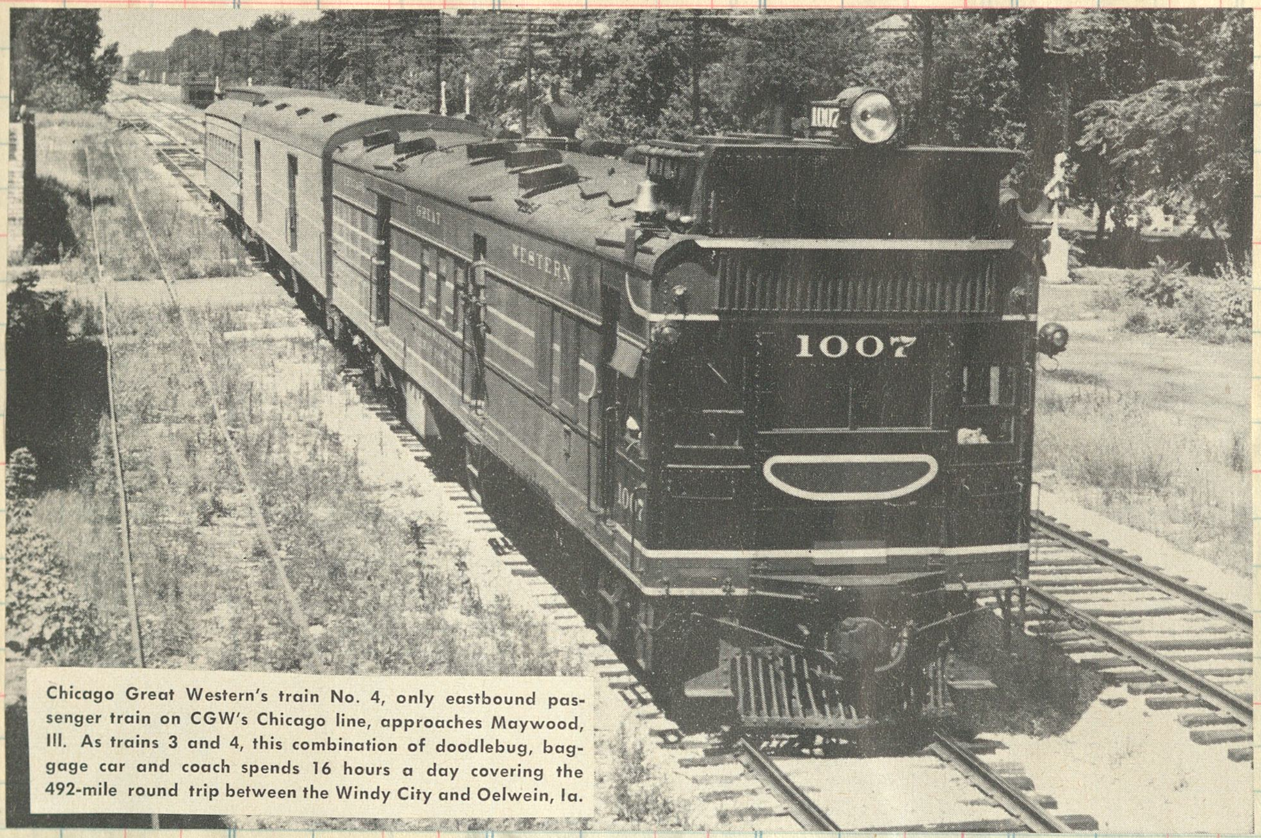


Who said ten wheelers can't be modern--take note of those disc drivers!! The 506, Baldwin 1910, waits for the highball at Marshalltown, Ia with #16.

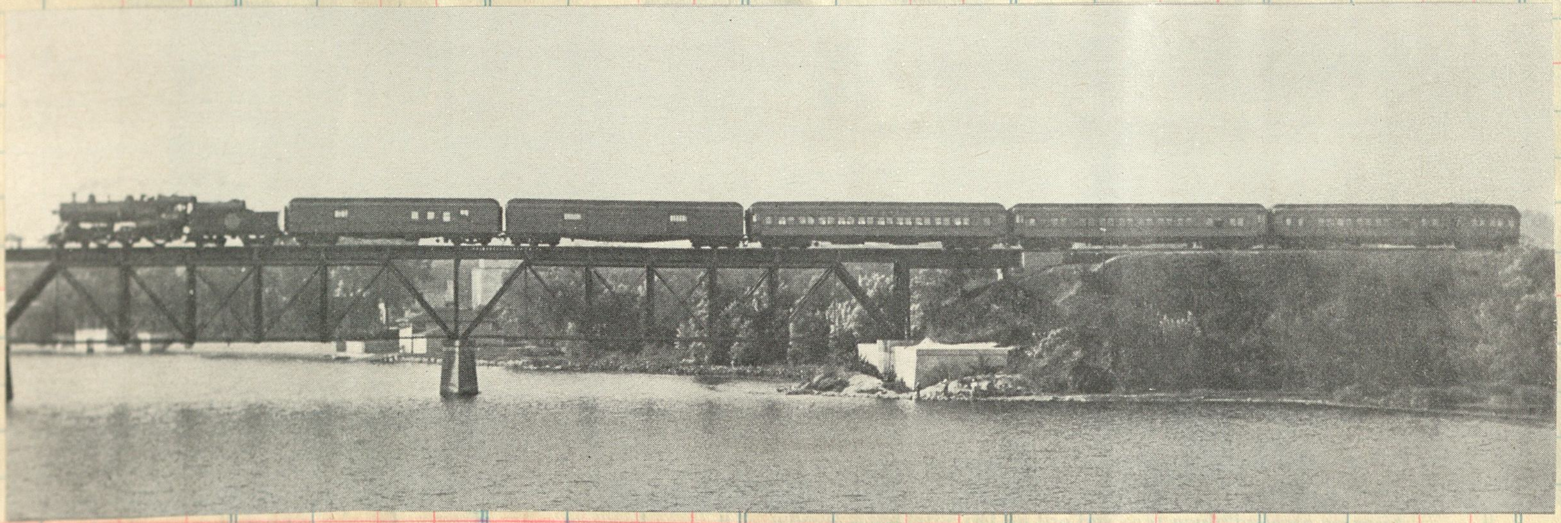
Clas. No. Sold Amount



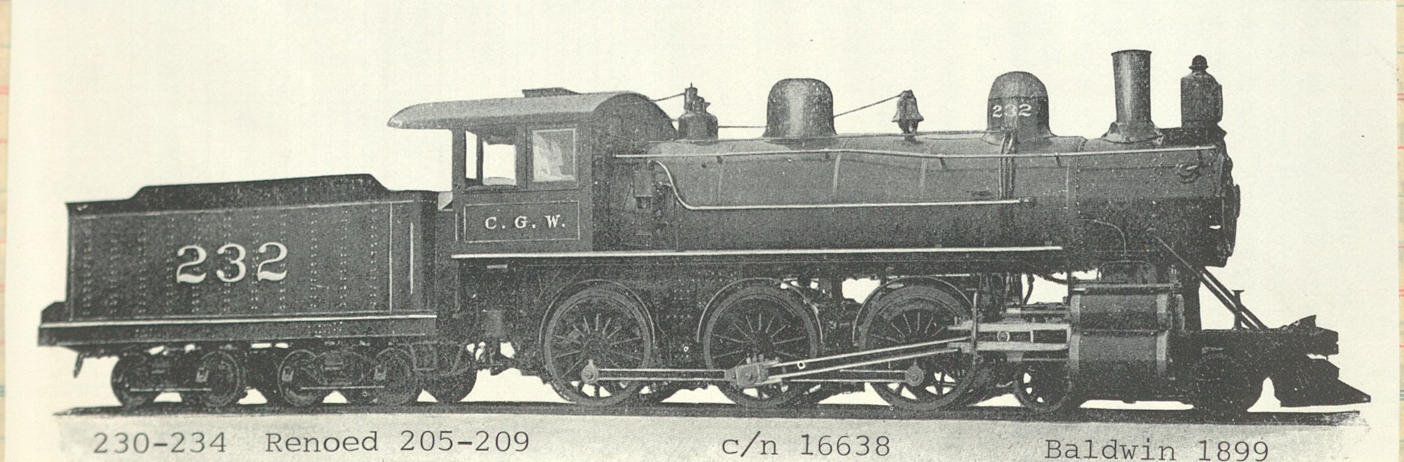
A 2-10-4 picks her way thru an overgrown right of way



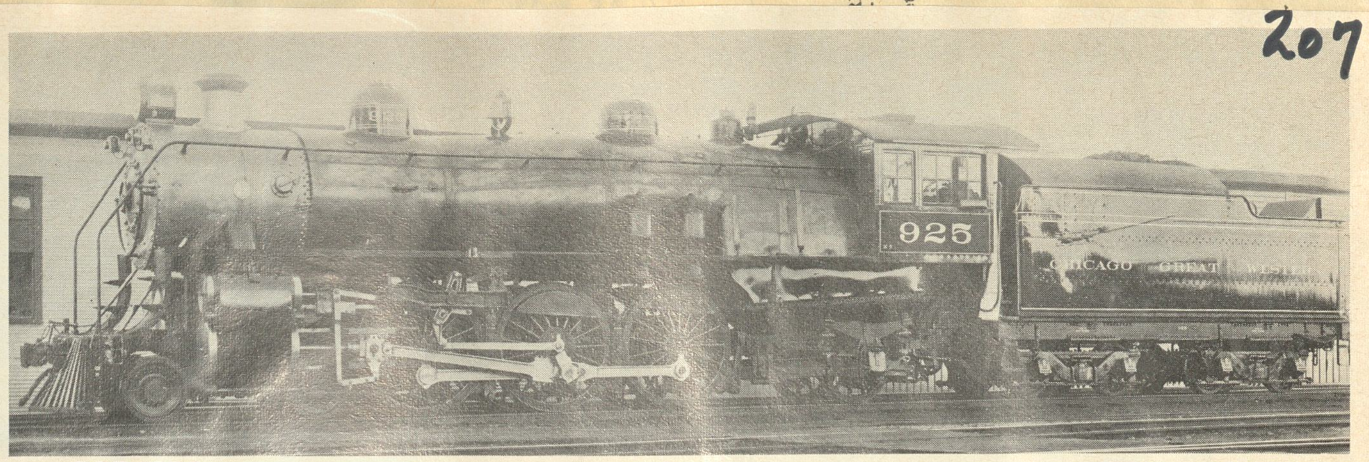
Chicago Great Western's train No. 4, only eastbound passenger train on CGW's Chicago line, approaches Maywood, Ill. As trains 3 and 4, this combination of doodlebug, baggage car and coach spends 16 hours a day covering the 492-mile round trip between the Windy City and Oelwein, Ia.



A perfect silhouette of an ideal consist--the "Minnesotan" xng the Fox River at StCharles, Ill behind 4-6-0 #509 Aug 1934



230-234 Renoed 205-209 c/n 16638 Baldwin 1899

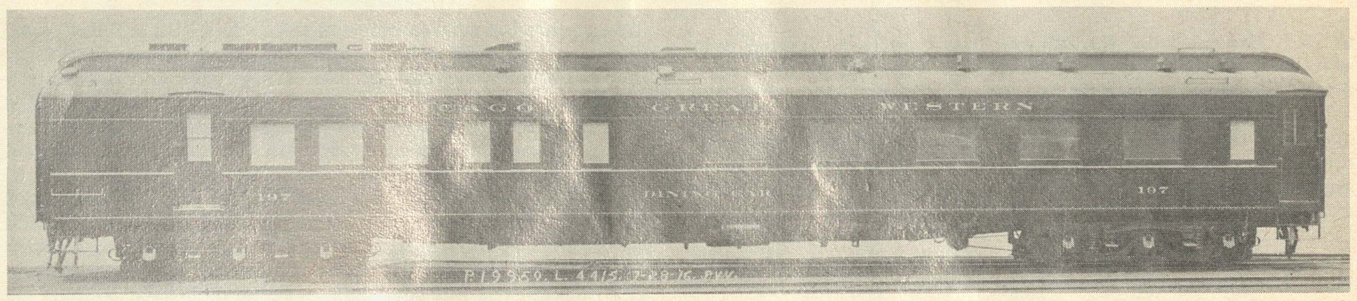


925-929 c/n 41000 Baldwin 1913

Author's collection.

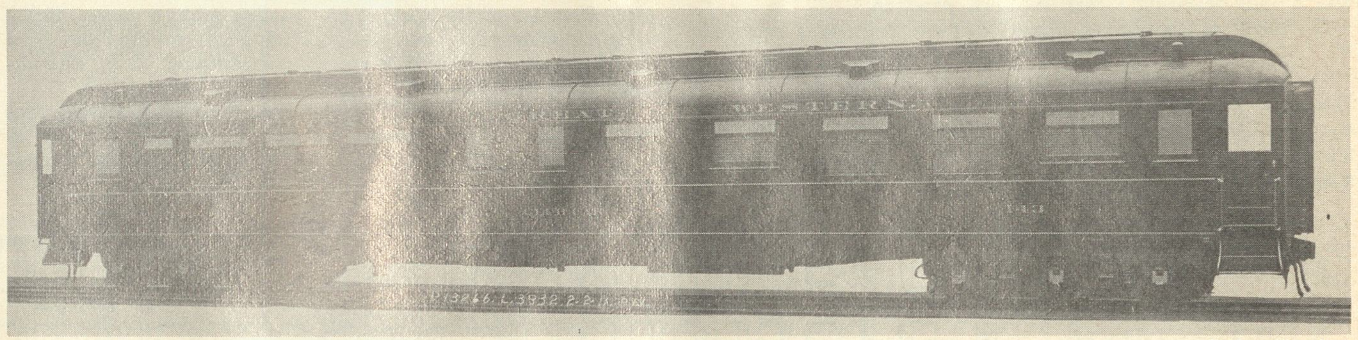
**FREE** of external piping and fitted with a flanged stack, Baldwin-built 4-6-2 No. 925 exhibited CGW's English style leanings.

## Great trains of the Great Western



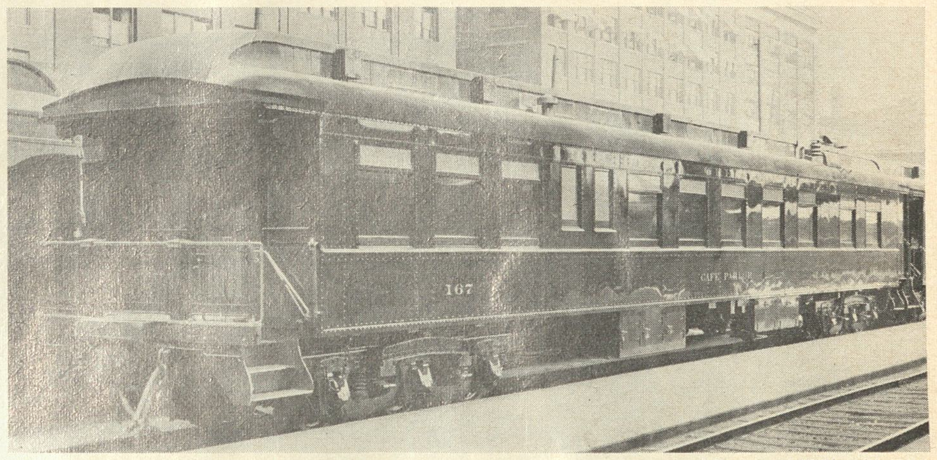
Pullman-Standard.

**DINING CAR** 197 and mate 196 were built by Pullman in 1916 for CGW Limited operating between Chicago and the Twin Cities.



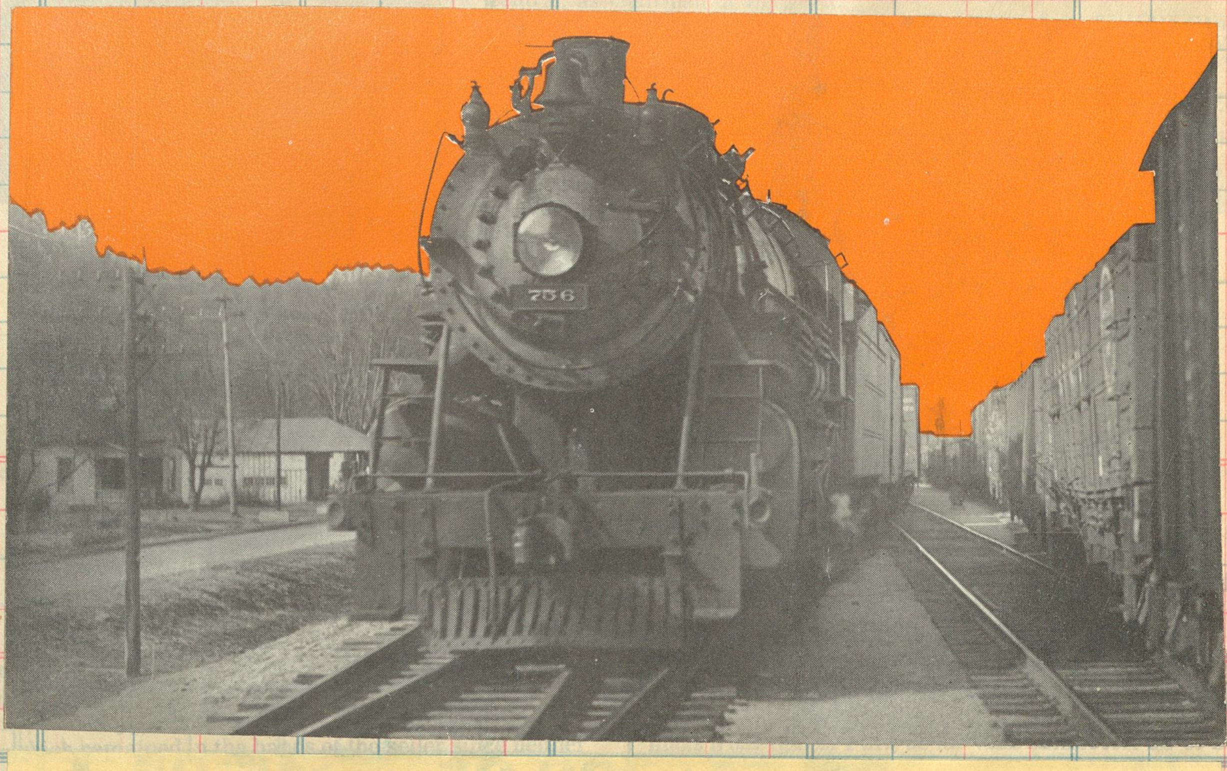
Pullman-Standard.

**CLUB CAR** 143 and mate 144 measured 72½ feet coupler to coupler; were built by Pullman in 1911 for Great Western Limited. Advertising by CGW stated that steel car 143 "has no peer."

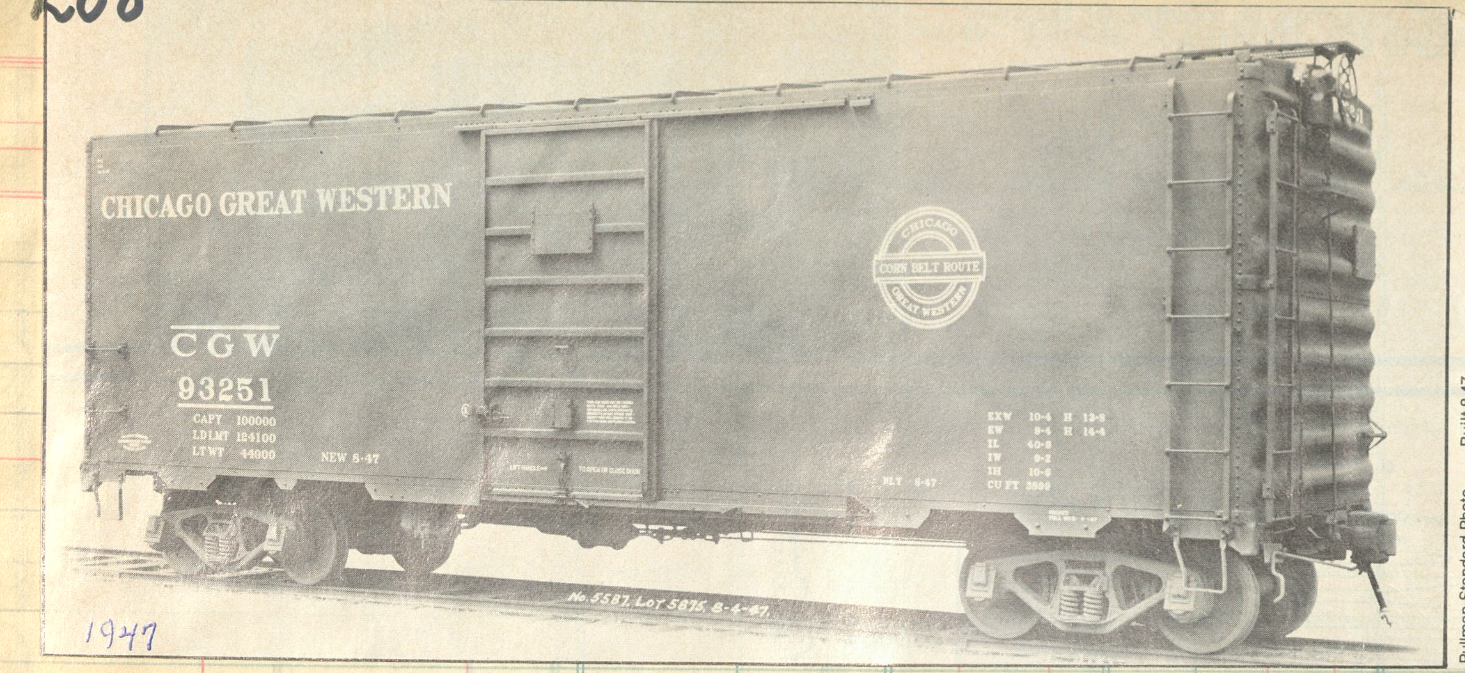


**OBSERVATION** 167 and mate 168 were steel cafe-parlors built by Pullman in 1915. The 80-foot 5-inch cars contained smoking room, parlor, cafe, and kitchen; were painted red and gold in 1924 for CGW's famous train, the Red Bird.

Collection of William Vaughn.

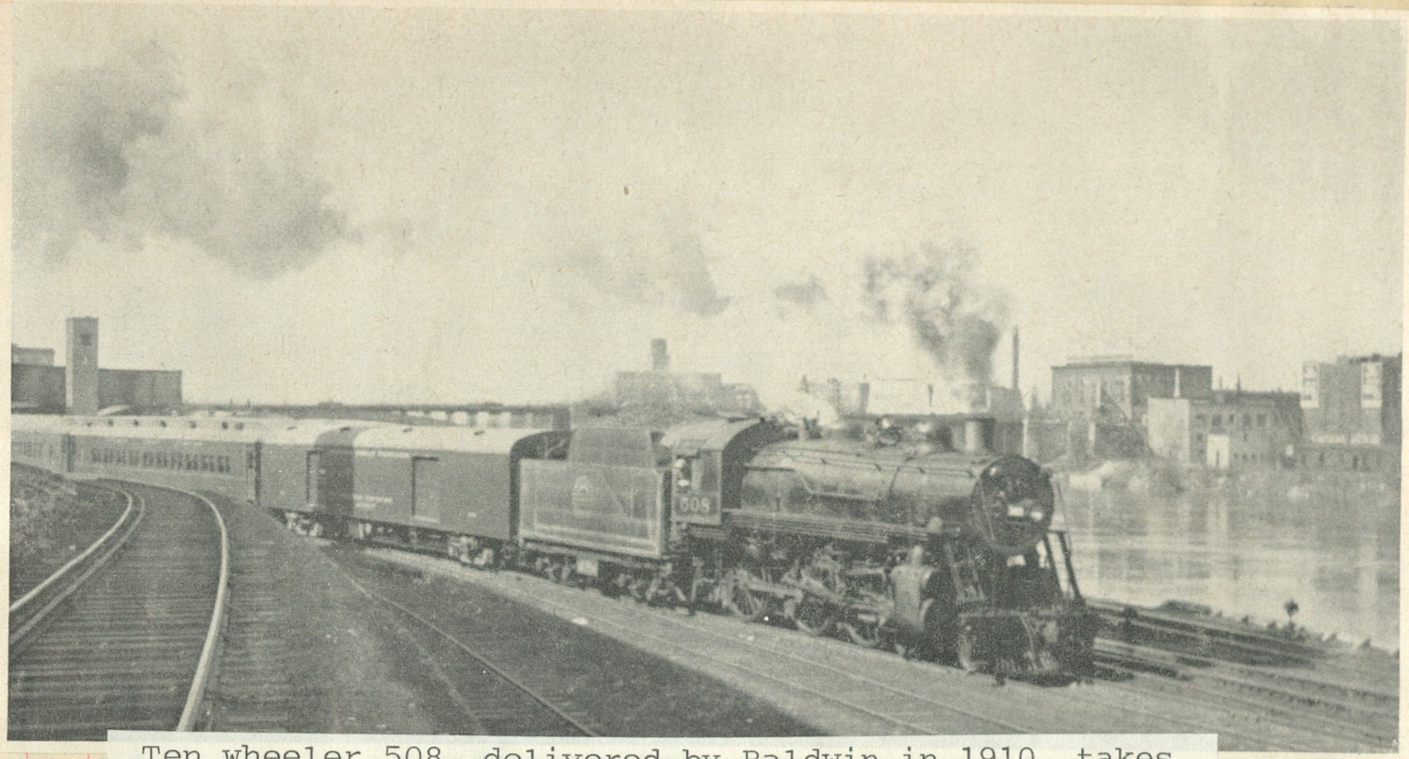


The Great Western received ten light USRA 2-8-2's from Baldwin in 1918. Noed 750-759, class L-3

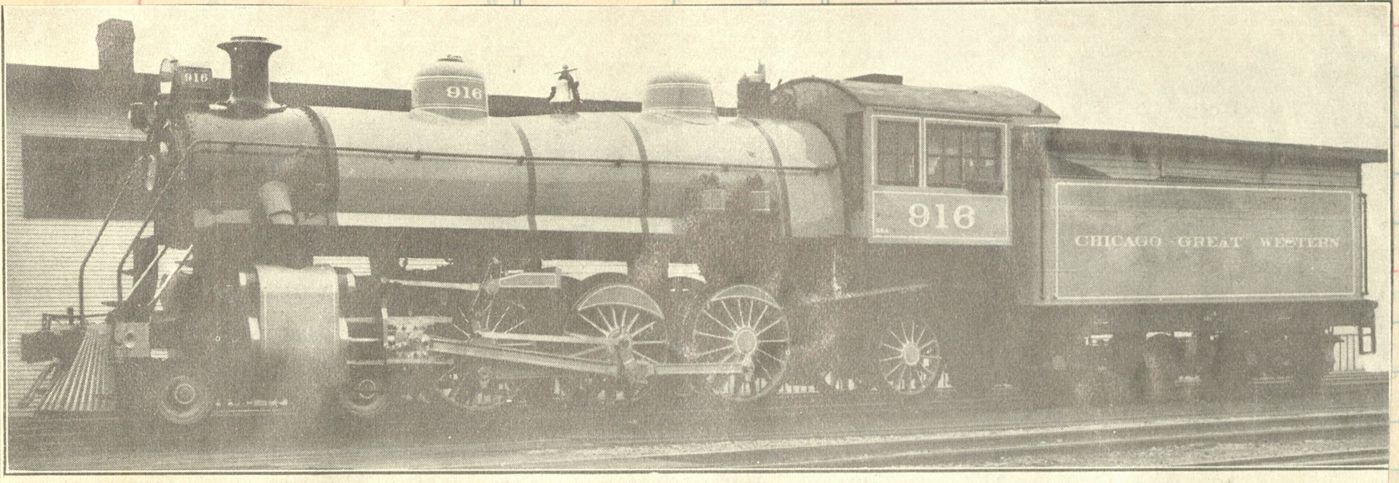

CHICAGO GREAT WESTERN
CGW
93251
CAPY 100000
LD LMT 124100
LT WT 44000
NEW 8-47
CHICAGO
CORN BELT ROUTE
GREAT WESTERN
No. 5587. LOT 5875. 8-4-47.

1947

Pullman Standard Photo Built 8-47

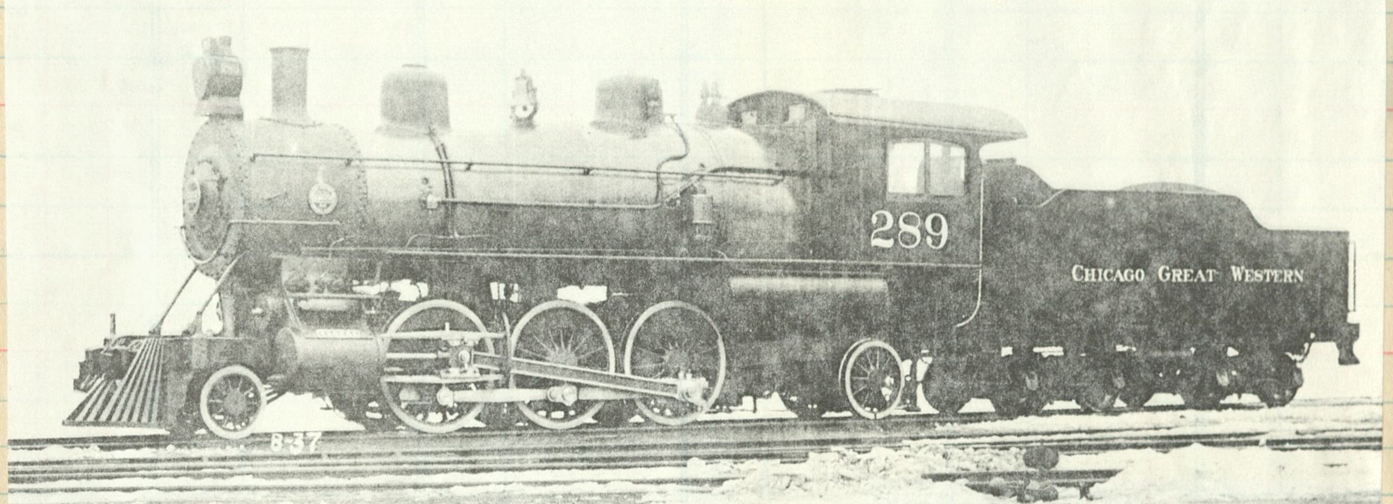


Ten wheeler 508, delivered by Baldwin in 1910, takes the Mill Cities Limited out of Minneapolis


916
CHICAGO GREAT WESTERN

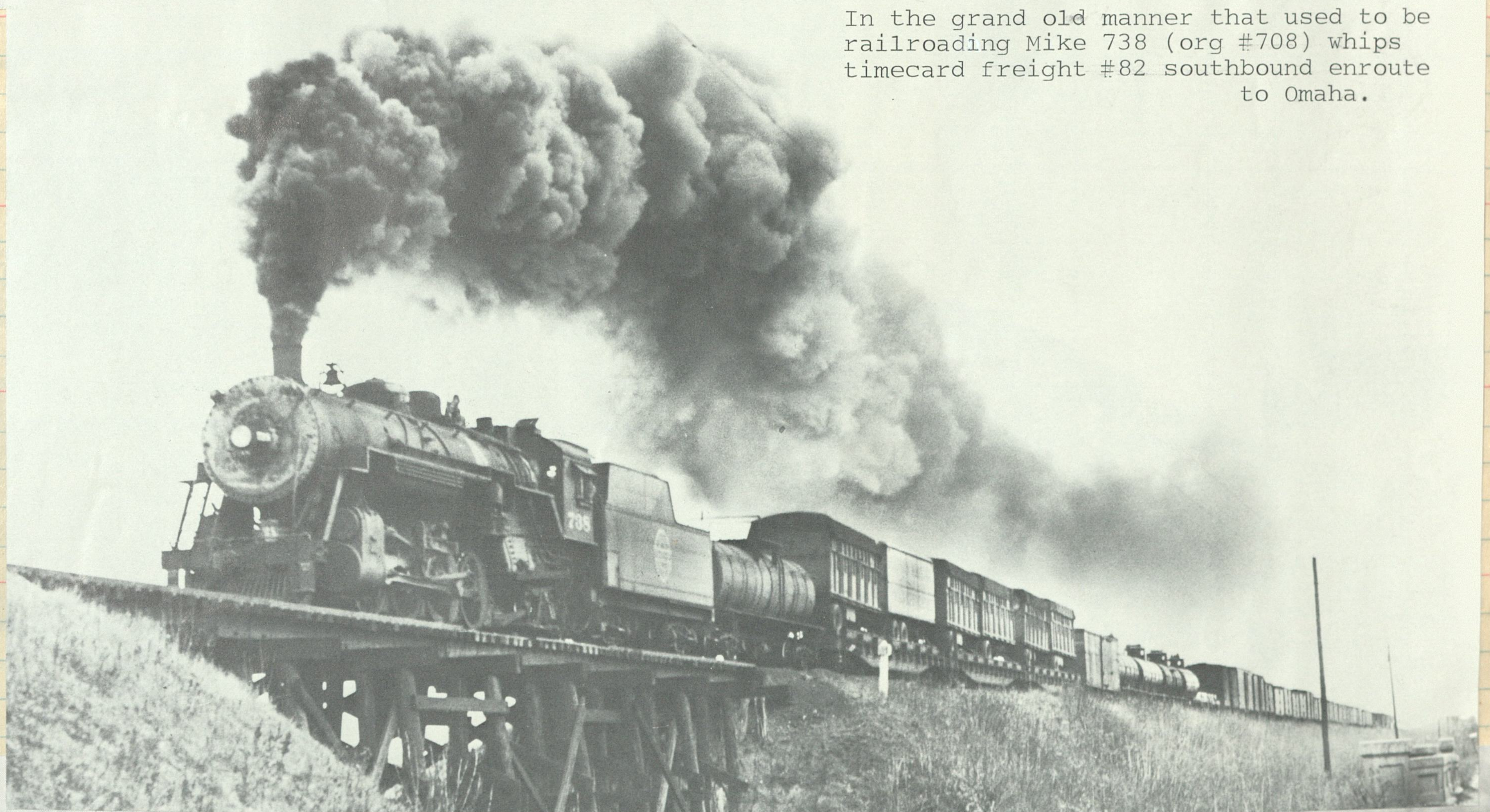
Covered Piping and Special Color Scheme Give the Chicago Great Western "English Type" Locomotive a Distinctive Appearance

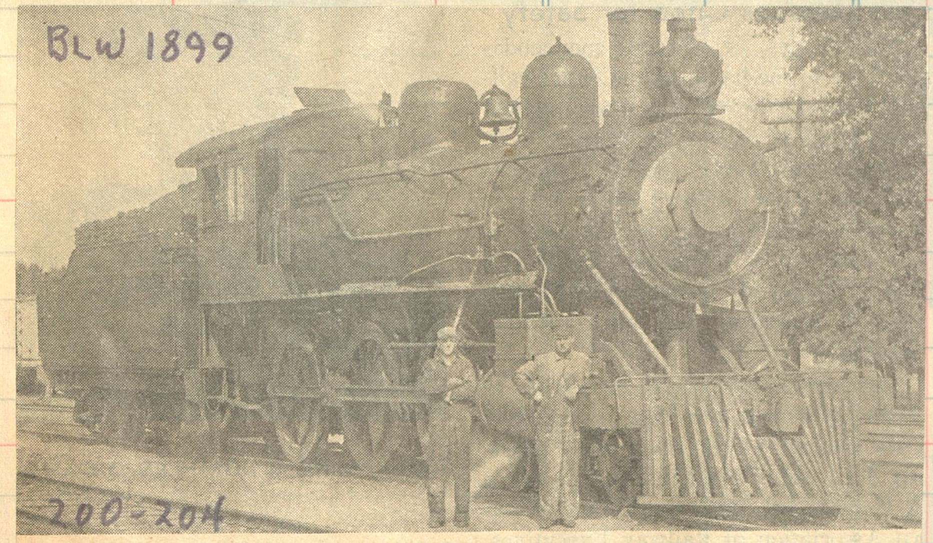
Prairie type 901-920, Brooks 1903, all were rebIt as 4-6-2's with same numbers. Shown here the 916 for hauling the "Red Bird" painted black, maroon with gold lettering.


289
CHICAGO GREAT WESTERN

273-292 c/n 26507 Brooks 1903

In the grand old manner that used to be railroading Mike 738 (org #708) whips timecard freight #82 southbound enroute to Omaha.

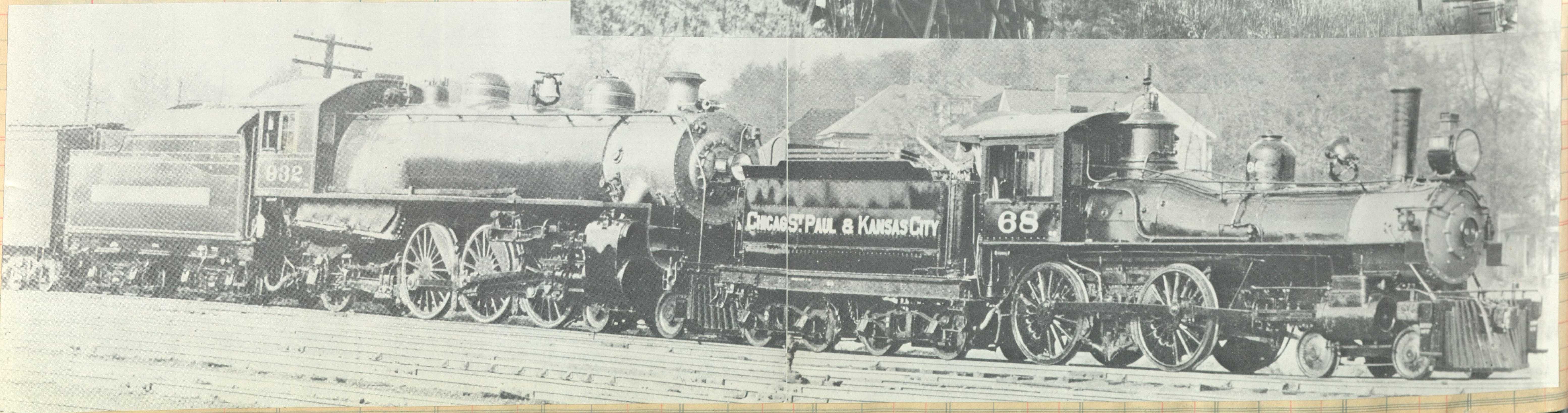




BLW 1899

200-204

CHICAGO GREAT WESTERN ENGINE 202 AT CLARION, IOWA, IN 1912
Standing on the pilot is Brother Madson, and beside him R. Reed, fireman. Photos submitted by Brother E. C. Weston, L.C., Div. 333.


932
CHICAGO ST. PAUL & KANSAS CITY
68

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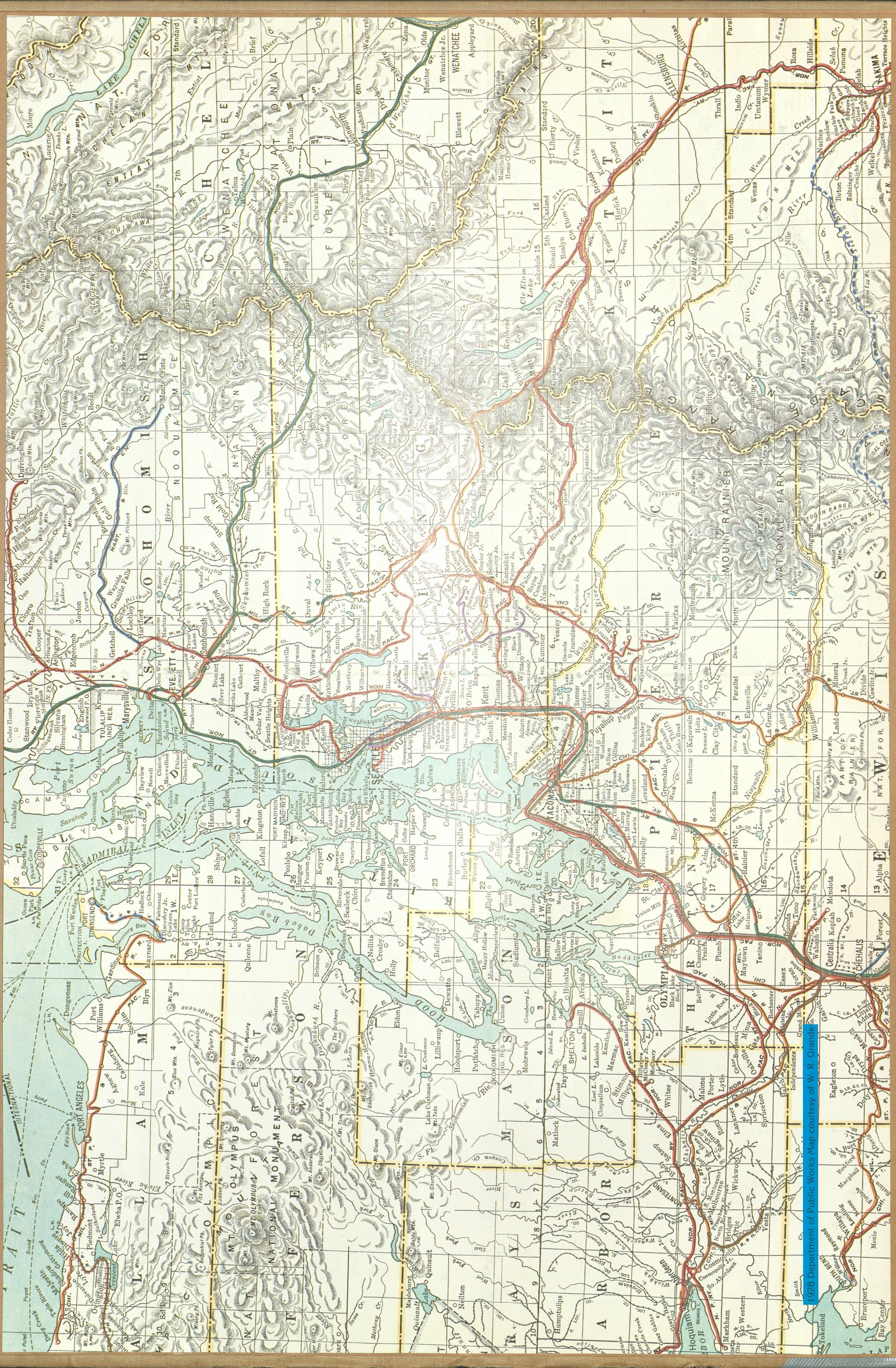

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HOOD CANAL
ADMIRALTY INLET

1928 Department of Public Works Map courtesy of W. R. Grande